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Research Paper

Price instability of onion in India – An analysis

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ABSTRACT : Onion is an important vegetable crop grown and consumed widely across the world. Even though India is the second largest producer of onion, its production in 2019 is nearly halved in comparison to 2018. There is a deficit of about 40 per cent in onion supply and hence supply is unable to cope up with the demand which resulted in the skyrocketing of prices. It is learnt that the prices of onion were hovering around Rs. 100 per kg. The sudden rise in prices of onion can be attributed to reduced sowings on account of delayed monsoons followed by excessive rainfall, mainly during harvesting season. Moreover, as per the media reports, few onion traders are trying to make a short term gain by creating artificial scarcity. The sharp rise in prices can be checked by releasing the stock available with the government agencies in short run and there is a dire need for a long term policy for stabilization of onion prices.

KEY WORDS : Prices, Scarcity, Stabilization, Trends

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INTRODUCTION :

Off late, the ghost of rising prices of food articles, vegetables in particular is again haunting the policy makers. A delay in arrival of monsoon and result of widespread excess rainfall, thereafter, has created a chaos in Indian agriculture more specifically rise in prices of vegetables. Among the vegetables, onion is one such vegetable which is catching the attention of all stakeholders as it is an invariable part of dietary system of every household in the country. It also plays an important role in earning foreign exchange due to increased exports in the recent decades, owing to increased production and higher demand in the international market. Onion is one of the most market sensitive commodities that creates ripples in the trade as well as in political arena. Its significant position in the diets across all income groups and an important ingredient in many Indian recipes, causes wide ranging effects if there is any significant change in price. It is the poor and the lower middle class who are hit hard in the event of rise inprice and so also the middle class. And at the same time, during rise in the price, though farmers are getting benefitted, but producer share in consumer rupee was least due to presence of long chain of intermediaries (Gummagolmath, 2013). High price variability in case of primary products affects both producers as well as consumers through a spill over effect to the other sectors, thereby leading to high inflation in the economy. Onions have a weight of 0.6 per cent in the overall inflation and contribute about 10 per cent to the change in inflation of vegetable basket. Thus, it is a major concern if any change

in the onion prices for the politicians, policy makers and experts. Among the agricultural products, prices of onions are more volatile than other vegetables due to low price and income elasticity and inherently unstable production. Additionally, market inefficiencies, hoarding of stocks (as reported by Competition Commission of India, 2012), weak supply chains and traders cartels in the market are also responsible for fluctuations in the onion prices.

It all started with skyrocketing of prices for the first time in the year 1998 due to low production on account of drought in the major producing states. Besides, during the same period, the Indian onion witnessed high demand in the international market and hence, Government of India came up with a policy of Minimum Export Price (MEP) for promoting and regulating exports of onion.

This scenario of skyrocketing of prices was repeated after a gap of seven years *i.e.* in the year 2005 and third time with an interval of another five years in 2010. Thereafter almost every alternate year, volatility in onion prices was noticed across major markets in the country.

Hence an attempt has been made in this study to ascertain the reasons for such an unruly behaviour of onion prices in the country.

MATERIALS AND METHODS :

Study area :

In this study, major onion producing states and marketing centres located in Maharashtra, Karnataka, Rajasthan and Tamil Nadu in India were selected for analysing the arrival pattern, price trend and its volatility in major markets for the time period of 2000 to 2019.

Sources of data:

For understanding the Indian scenario of onion crop, data pertaining to area, production and yield in major producing states in India for the years of high prices *i.e.* 2005, 2011, 2013, 2015-19 were collected from Directorate of Economics and Statistics (DES) and State's Season Crop Reports. Information on Indian onion exports for various periods from 1950-51 to 2017-18, were collected from Directorate General of Commercial Intelligence and Statistics (DGCIS), Agricultural and Processed food Products Export Development Authority (APEDA) and National Agricultural Co-operative Marketing Federation of India Ltd. (NAFED).

In order to analyse the trend in arrivals and prices, monthly wholesale prices and arrivals during 2010 to 2019 in major markets in India were also collected from National Horticultural Research and Development Foundation (NHRDF) official website. Monthly retail prices for the year 2019 were collected from National Horticultural Board (NHB) to analyse the retail mark-up. The data collected from different sources was analysed by using suitable quantitative statistical methods.

Data analysis:

– For studying the growth in area and production of onion in India during various periods in major producing states, percentages were calculated.

– For analysing the seasonal trends in prices, arrivals seasonal indices were calculated using wholesale prices and arrivals in seven major markets in India.

– Co-efficient of variations were worked out to study the volatility in prices in different periods using the formula:

$$\text{C.V.} = \frac{\text{SD}}{\text{AM}} \text{x100}$$

where, SD = Standard deviation, AM = Arithmetic mean of the prices.

Present scenario:

India is the second largest producer of onion in the world next to China with a share of 22.92 per cent during 2017-18 as compared to 19 per cent during 2008-09. In India, onion is largely grown in the western, southern and northern parts both in *Rabi* and *Kharif* seasons. Its supply is available throughout the year albeit with different volumes. India produces all three varieties of onion – red, yellow and white.

It is cultivated in almost all the states in the country and the major producing states are Maharashtra, Karnataka, Madhya Pradesh, Gujarat, Rajasthan, Andhra Pradesh, Uttar Pradesh, Odisha and Tamil Nadu. Maharashtra is the leading producer of onion in the country accounting for 30.03 per cent of total production followed by Madhya Pradesh (16.59 %), Karnataka (13.60 %) and Gujarat (5.2%) (2016-17). All India production during 2017-18 was 12 per cent higher as compared to the past five years. In spite of increase in production over a period of time, onion is subjected to high volatility in terms of prices due to various reasons like change in arrival pattern, weather conditions, export policies, artificial hoarding by the market functionaries etc.

RESULTS AND DATA ANALYSIS :

The results obtained from the present investigation as well as relevant discussion have been summarized under following heads :

Area, production and productivity of onions in India:

Onion is grown in all the three seasons *i.e. Kharif* (summer), late *Kharif* and *Rabi* (winter) ensuring year round availability. In the northern part of the country, onion is usually grown in the winter (*Rabi*) season. However, in the southern and western states of Andhra Pradesh,

Table 1: State wise area, production and yield of onions in India -Major states

State/UT	2005	2011	2013	2015	2016	2017	% change over previous year
Area ('000 Ha)							
Maharashtra	177	382	468	522.4	481.1	508	5.59
Madhya Pradesh	76	177.2	117.3	118.2	150.8	150.9	0.07
Karnataka	151	88.1	136.6	190.2	217.8	195.3	-10.33
Bihar	36	61.3	72.8	86.3	51.6	53.8	4.26
Rajasthan	37.8	53.8	54.3	53.2	54.1	64.8	19.78
Andhra Pradesh	44.5	48.5	55.8	54	62.5	42	-32.80
Haryana	25.5	73.5	57.5	45	41.7	29.9	-28.30
Gujarat	15.5	27.5	30.2	34	31	22.5	-27.42
Uttar Pradesh	26.8	37.1	40	25	29	26.9	-7.24
Odisha	29.2	35.2	35.8	36.7	25.6	33.5	30.86
Tamil Nadu	15.9	23.7	24.3	23.5	33.4	28.4	-14.97
Total	661.9	1087.3	1203.6	1320.1	1305.6	1285	-1.58
Production ('000 MT)							
Maharashtra	2469	5638	5864	6529.3	6734.7	8854.1	31.47
Madhya Pradesh	2128	2451.2	2826	2848	3721.6	3701	-0.55
Karnataka	870	1957	2065.2	2696	3049.5	2986.6	-2.06
Bihar	696	1562.2	1851.2	1435.1	1290.2	1240.6	-3.84
Rajasthan	572	1236.7	1304.2	1355.8	1249	996.7	-20.20
Andhra Pradesh	427.2	824.8	1004.6	1247.3	1149.3	915.7	-20.33
Haryana	328.2	664.2	705	885.4	916.4	701.5	-23.45
Gujarat	317.7	589.8	672.2	544.6	682.9	546.2	-20.02
Uttar Pradesh	243.9	556.5	472.7	422.8	465.5	439.6	-5.56
Odisha	233.8	419	432.1	381	422.1	379.3	-10.14
Tamil Nadu	128.1	383.5	410	376	378.6	301.1	-20.47
Total	8682.6	17511.1	19401.7	20931.3	22427.4	23262.3	3.72
State/UT	2005	2011	2013	2015	2016	2017	
Yield (Ton/Ha)							
Maharastra	14.0	14.8	12.5	12.5	14.0	17.4	
Madhya Pradesh	28.0	13.8	24.1	24.1	24.7	24.5	
Karnataka	5.8	22.2	15.1	14.2	14.0	15.3	
Bihar	19.3	25.5	25.4	16.6	25.0	23.1	
Rajasthan	15.1	23.0	24.0	25.5	23.1	15.4	
Andhra Pradesh	9.6	17.0	18.0	23.1	18.4	21.8	
Haryana	12.9	9.0	12.3	19.7	22.0	23.4	
Gujarat	20.5	21.5	22.3	16.0	22.0	24.3	
Uttar Pradesh	9.1	15.0	11.8	16.9	16.1	16.4	
Odisha	8.0	11.9	12.1	10.4	16.5	11.3	
Tamil Nadu	8.1	16.2	16.9	16.0	11.3	10.6	
Total	13.1	16.1	16.1	15.9	17.2	18.1	

Karnataka, Tamil Nadu, Gujarat and Maharashtra, it is grown in winter (*Rabi*) as well as in the rainy (*Kharif*) seasons. Currently *Kharif* onion is gaining ground in the northern part of the country as well. Thus, it is cultivated and is available to domestic consumers, as well as for export throughout the year.

During the year 2017-18, onions were grown in an area of 1285 thousand hectares with a production of 23262 thousand tonnes in the country (Table 1). It was observed that the Odisha recorded a positive growth in area (30.86 %) during 2017-18 over 2016-17. This was followed by Rajasthan (19.78 %), Maharashtra (5.59 %), Bihar (4.26 %) and Madhya Pradesh (0.07 %). On the contrary in the case of remaining states there was a negative growth that lead to the overall decline in area in India by 1.58 per cent in 2017-18 as compared to 2016-17.

With respect to the production, Maharashtra state recorded more than 31.47 per cent increase despite of its low growth in area due to higher yields. Whereas, in case of other states,a negative growth was recorded.The decline in production of other states was compensated by Maharashtra state that reflected in increase in overall production by 3.72 per cent at all India level.

All in all, in the past two decades, area and production of onion witnessed positive growth with fluctuations due to weather, yield and responsiveness of onion to the prices.

Temporal behaviour of arrivals and prices in India:

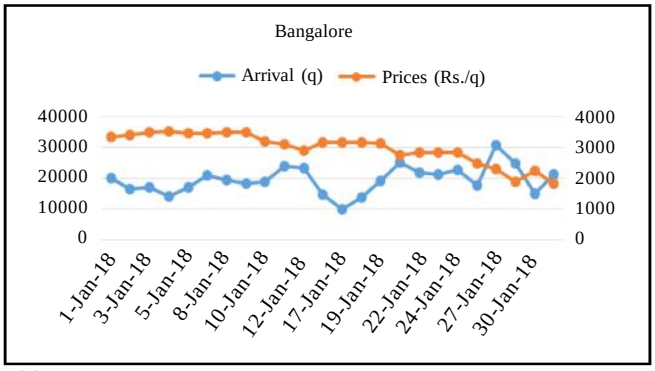
Depending on the production of onion, there is a seasonality in arrivals and prices every year. The changes in arrivals may occur due to a rise or fall in production, unseasonal or heavy rainfall, poor storage, early harvesting, lack of retention power by growers and exports etc. Keeping in view the recent spurt in onion prices, the trend of monthly arrivals and prices of onion in India were analysed during 2018 and upto the latest month of 2019 for which data was availableand the results of the same are presented in the Table 2 and Fig. 1.

Fig. 1 : Seasonal indices of arrivals and prices of onion in India during 2018

In order to study the arrival and price pattern, all the markets both consuming and markets located in production centre in India were included. During 2018, it was evident that the arrivals were higher in the months of January, February, May, October and December as these months are coinciding with harvesting season across the country. On the contrary, prices recorded were maximum in January (225.87), February (149.79) and

Table 2: Seasonal indices of arrivals and prices of onion in India during 2018 and 2019

Month	2018		2019	
	Arrivals	Prices	Arrivals	Prices
January	114.77	225.87	163.13	55.53
February	115.60	149.79	131.78	49.78
March	95.03	88.34	105.71	52.76
April	87.97	69.24	116.60	58.29
May	111.51	61.62	91.50	66.15
June	94.83	76.55	98.79	82.45
July	79.79	98.95	79.01	94.17
August	85.66	92.82	81.44	125.17
September	91.70	81.73	66.05	198.31
October	113.79	98.24	65.98	217.38
November	98.12	89.12		
December	111.23	67.75		



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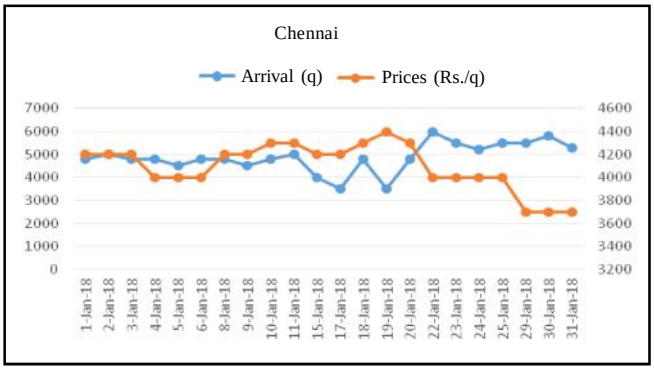

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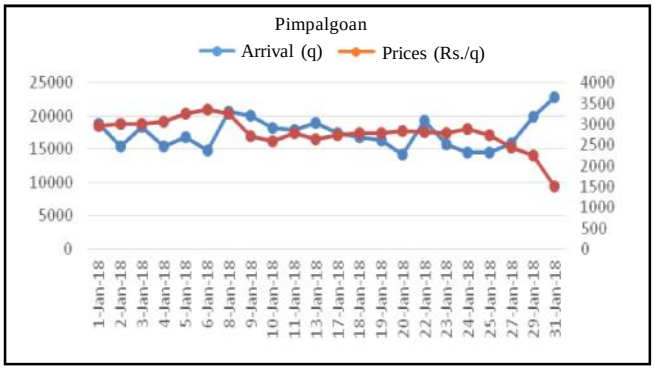

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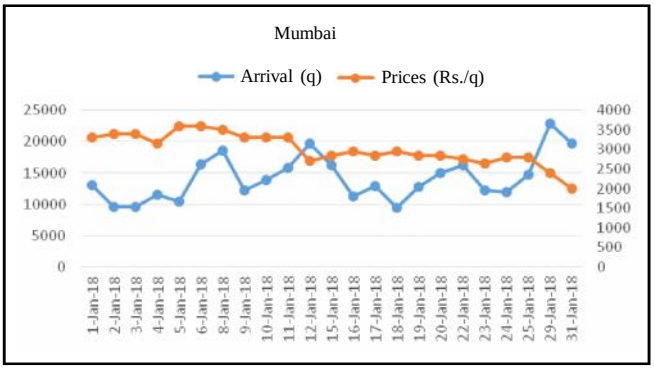

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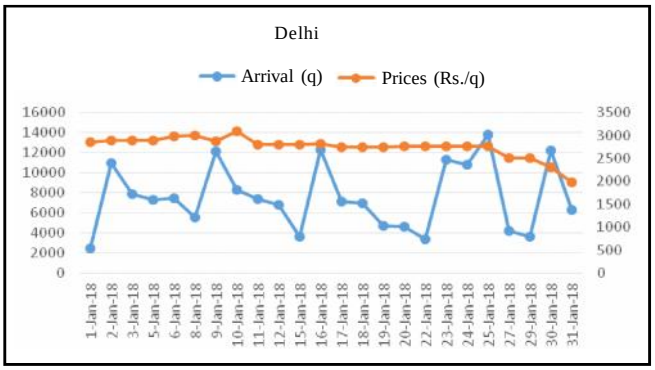

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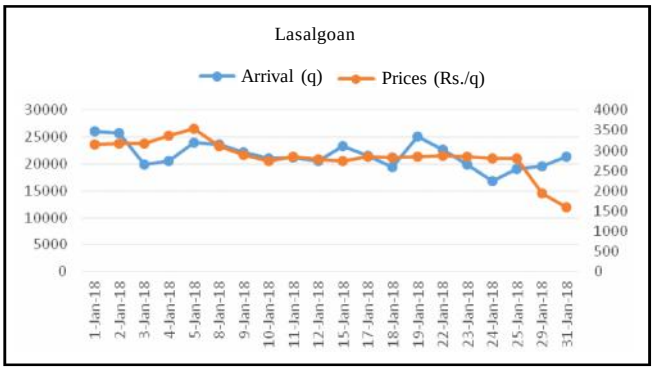

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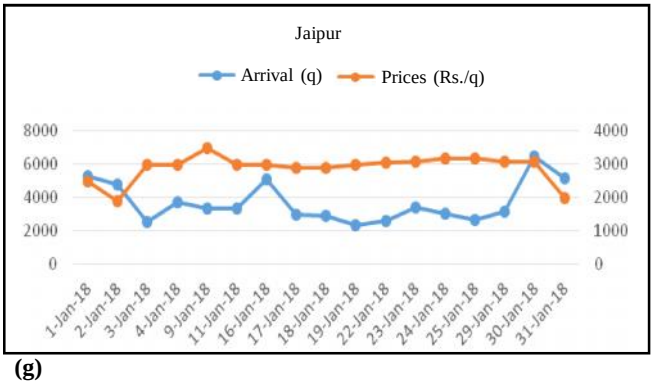

(g)

Fig. 2 a to g: Arrivals and prices of onion in major markets during January, 2018

then declined for rest of the months. However, it is interesting to note that there was an increase in the prices of onion during January to February despite increase in arrivals. This might be due to higher MEP during these months and hence, traders resorted for large scale purchase of onion. On the contrary, during 2019, for the same months, there was a decline in prices with increase in arrivals. The trend of arrivals and prices during the peak months of 2018 in major markets were presented in Fig. 2a. to 2g.

A peculiar trend can be observed in 2019 which depicts the current behaviour of onions in India. It is revealed from Table 2 and Fig. 3, that during 2019, with a gradual decline in arrivals from May to July, the prices increased marginally. However, there was a sudden jump in the prices of onion from August 2019 and the same trend continued till November, 2019. This trend may be attributed to the lower arrivals on account of decline in production by major producing states.

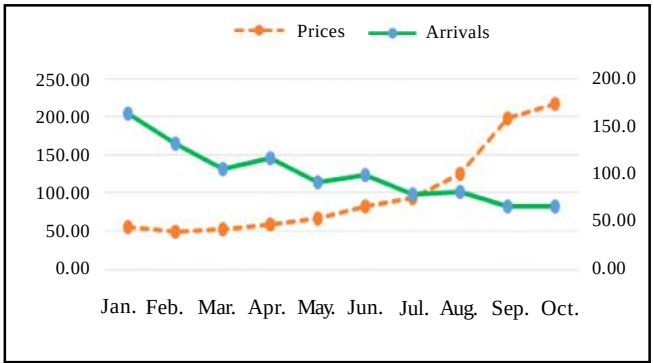

Fig. 3 : Seasonal indices of arrivals and prices of onion in India during 2019

The reasons for decreasing trend of arrivals from April 2019, was due to drought conditions prevailing in producing region. The likely shortfall in production had put pressure on both availability and prices during the lean season that has pushed wholesale onion prices to a four-year high.The crunch in onion supply has sent prices soaring in many places witnessing an increase of nearly Rs. 30-40 per kg. There is a deficit of about 40 per cent in onion supply during 2019 and hence, arrivals were unable to cope with the demand and prices have shot up suddenly. Further, delayed but heavy rainfall across India also damaged the standing crop and also affected stored onions due to high moisture.

A dip in the *Rabi* production in Maharashtra and other parts of the country, especially Karnataka, has also resulted in the price rise. Besides, widespread protests by farmers across Nashik district in Maharashtra on account of stock limit among traders have hit the supply of onions to mandis or wholesale markets, as a result, prices have bounced back to the highest level. According to media reports, traders opined that this price rise was mostly due to reduced purchase by traders, who fear action if they violated the 500-quintal-per-day stock limit put on them by the government. The unseasonal rainfalls in Karnataka have reduced onion supplies from Hubli, one of the largest producing centres of pre-season crop. Also, supply from Nashik district of Maharashtra has declined significantly which resulted in sharp increase in prices. During skyrocketing of prices, normally government resorts to market operations by releasing stocks to contain the rising prices of onion. Besides, government is also resorting to contain price by increasing

Table 3 : S.I. of arrivals and prices in major markets of onion (2010-18)

	Jaipur		Delhi		Bangalore		Chennai		Mumbai		Pimpalgoan		Lasalgoan	
Month	Arrivals	Prices	Arrivals	Prices	Arrivals	Prices	Arrivals	Prices	Arrivals	Prices	Arrivals	Prices	Arrivals	Prices
January	90.60	117.33	94.20	113.88	82.09	117.93	98.72	118.03	118.59	108.07	122.73	113.95	163.56	114.07
February	88.87	92.01	88.36	88.15	66.50	85.96	109.42	87.63	98.85	78.45	115.13	80.46	145.03	78.72
March	92.06	72.77	102.06	71.96	76.18	63.81	107.51	68.76	109.36	62.08	81.84	59.36	109.81	59.05
April	81.67	62.12	94.66	63.72	72.09	59.59	95.70	64.94	100.59	60.24	105.38	58.31	88.08	58.01
May	148.16	54.57	112.57	58.84	74.19	64.95	111.35	66.35	104.50	62.72	162.09	61.92	118.53	59.63
June	103.18	61.73	108.38	72.72	71.42	86.93	107.62	81.34	97.04	78.92	108.25	68.49	95.38	77.93
July	122.89	87.10	102.88	95.24	71.00	107.22	104.54	96.79	93.13	95.06	95.12	94.89	86.20	99.96
August	103.74	129.32	93.22	132.26	78.42	132.08	96.88	126.65	84.28	135.59	55.08	145.10	81.86	142.73
September	83.24	152.19	88.65	140.87	134.66	123.33	93.27	127.18	86.24	138.58	85.14	150.28	62.71	144.40
October	84.46	144.72	93.02	138.23	205.58	122.04	95.86	121.82	93.66	140.45	65.36	143.60	63.94	142.99
November	95.25	122.29	109.49	121.75	163.11	123.96	88.25	127.94	101.77	130.15	77.66	125.02	63.30	122.00
December	105.88	103.84	112.51	102.39	104.76	112.19	90.88	112.58	112.00	109.67	126.22	98.63	121.60	100.52

MEP and thereby ensuring availability of onion for domestic market. This knee jerk approach of the government is hurting the farmers as compared to traders and consumers. Because during low prices, farmers feel that the same action of stabilizing the prices is not seen. Many times, the prices are so low that the farmers are unable to cover even the cost of cultivation.

The seasonal indices of the arrivals and prices of onions in major markets of the country from 2010 to 2018 were also calculated to throw more light on the issue (Table 3).

Maharashtra markets:

Maharashtra which produces 35 per cent of India's total 23.5 million tones of onion is a major market in India (Economic Times). Depending on the time of transplantation and harvest, onion growers in the state classify their crop as *Kharif* (May- July transplant and harvesting in October- November), late *Kharif* (September- November transplant and harvest post January) and *Rabi* (December- January transplant and harvest post April). These three crops feed the market round the year.

Lasalgoan market:

Lasalgaon mandi, Asia's largest onion selling market sets the tone for sales of the kitchen staple in the country. As indicated in Table 3. The arrivals started increasing from the month of December, reaches peak in January (163.56) and then declined. The prices recorded highest (144.40) during the lean period of arrivals (62.71) *i.e.* during September month. Even during the peak period of arrivals the prices were more or less high (114.07).

Pimpalgoan market :

The behaviour of prices in Pimpalgoan market was found to be similar to that of Lasalgoan market which recorded maximum in the month of September (150.28). The arrivals were found to be peak in May (126.22) and started declining. Also increase in arrivals can be observed in December and January.

Mumbai market:

An increasing trend in arrivals was observed from November till January (111.89). Also prices exhibited an increasing trend from August till October (140.45) and then declined.

Jaipur market:

The arrivals were found to be maximum during the month of May as indicated by the seasonal index 148.16 as the onion is grown in *Rabi* season in Rajasthan and hence, major arrivals will be reaching the market during April and May. Also during the same period the prices recorded lowest (54.57) which showed a negative correlation between arrivals and prices.

Delhi market:

Arrivals in Delhi market exhibited a different trend where in maximum arrivals can be observed during May (112.57) and December (112.51). But prices recorded lowest in May (58.84) and highest in the month of September (140.87). However, the prices were higher during August to January.

Bangalore market:

A peculiar situation could be observed from the trend in arrivals and prices of onion in Bangalore market and continued to increase during November-December. The values of arrivals started increasing from September and touched peak during October. It is stated that during high arrivals, more number of traders operated in this market and thus due to competitive situation there was increase in prices, even during high arrivals. Similarly, prices started increasing during July month and recorded peak in August during which the arrivals started increasing. Probable reason might be the increasing trends in the prices attracted farmers to bring more and more produce into the market.

Chennai market:

Major fluctuations were not observed in the arrivals but prices revealed an increasing trend from June till they reached peak in November.

However, more or less negative relation can be observed between arrivals and prices in Jaipur, Delhi, Chennai, Lasalgoan markets.

The seasonal behaviour of arrivals and prices of onions during 2019 in major markets of the country during 2019 are presented in Table 4. The results clearly indicated that in almost all the markets under study except in Jaipur and Chennai, the prices exhibited an increasing trend from January to October. The spurt in the prices was mainly due to the shortage of supply following a dip in sowing of summer onions in Maharashtra and late arrival of *Kharif* produce from Karnataka. The

corresponding indices of arrivals were low during the months of September and October which can be due to the stock limits imposed on thewholesalers and retailers not exceeding 500 quintals and 100 quintals, respectively per day.

Volatility of arrivals and prices in major markets:

To measure volatility in arrivals and prices of onion, Co-efficient of variation was calculated in major markets for the months of November 2013-19 and October 2019 (Table 5). As these markets are having significance in the trading of onion, the magnitude of volatility was calculated. It was found that, the magnitude of co-efficient of variation for arrivals was higher during November 2019. At the same time, compared to October 2019, the volatility in prices was higher during November 2019.

This indicates that the fluctuations in the supply of onion are causing rise or fall in the prices on daily basis. Hence, farmer is caught unaware of as to what price will be fetched to him on a given day. This phenomenon coupled with realization of meagre proportion of consumer price due to long value chain is hurting the farmers.

Retail versus wholesale prices:

As evident from the Table 6 and 7, among India's eight largest metros, consumers in Delhi are the most short-changed by retailers of onions with margins between the wholesale and retail prices being much higher than other cities. Retail mark-up from Jan. 2016 to Aug. 2019 shows that retail prices prevailing in Delhi were 2.5 times more than the wholesale prices followed by Pune.

Table 4 : S.I of arrivals and prices in major markets of onion during 2019

Months	Jaipur		Delhi		Bangalore		Chennai		Mumbai		Pimpalgoan		Lasalgoan	
	Arrivals	Prices	Arrivals	Prices	Arrivals	Prices	Arrivals	Prices	Arrivals	Prices	Arrivals	Prices	Arrivals	Prices
January	115.30	47.37	96.03	7.50	144.14	55.73	109.86	66.59	111.82	43.35	127.88	40.83	120.35	37.76
February	104.74	47.97	104.34	8.15	108.25	50.68	110.02	50.83	108.71	35.30	106.69	30.43	149.30	30.00
March	79.15	51.88	114.67	8.95	123.82	48.89	106.52	51.87	111.35	43.48	51.38	43.30	122.76	41.30
April	148.03	56.49	98.19	7.67	127.62	56.58	105.69	64.17	120.25	56.73	161.75	63.41	116.09	59.10
May	140.44	59.69	111.32	8.69	98.27	69.19	106.30	66.96	86.32	68.03	150.01	66.37	93.50	66.27
June	62.06	69.85	112.03	8.75	98.88	81.82	95.16	93.40	94.23	91.80	106.67	84.02	104.05	86.96
July	70.02	89.46	83.16	6.49	96.58	88.24	88.63	102.89	81.01	91.24	82.60	89.52	107.16	89.12
August	73.91	95.71	103.46	8.08	106.90	124.65	84.07	119.40	121.81	129.13	93.89	129.34	111.21	133.78
September	63.78	239.39	87.69	6.85	78.81	212.49	90.83	194.81	92.60	220.92	74.34	231.31	56.27	234.21
October	142.56	242.20	89.10	6.96	16.72	211.74	102.92	189.07	71.90	220.02	44.79	221.47	19.31	221.51

Table 5 : Volatility of arrivals and prices of onions in major markets

Months	Jaipur		Bangalore		Delhi		Lasalgoan	
	C.V. of arrivals	C.V. of wholesale prices	C.V. of arrivals	C.V. of wholesale prices	C.V. of arrivals	C.V. of wholesale prices	C.V. of arrivals	C.V. of wholesale prices
November,2013	13.45	19.29	27.07	24.30	40.51	17.88	44.86	29.84
December,2013	19.80	24.94	39.09	26.64	33.44	25.42	25.53	24.35
November,2015	27.23	13.04	51.67	8.40	41.39	14.43	50.32	14.17
December,2015	20.51	14.56	30.73	8.02	35.64	12.40	38.51	18.77
November,2016	63.44	13.57	46.75	6.12	39.50	23.68	49.91	13.58
December,2016	34.82	20.73	39.37	14.84	44.28	6.70	46.24	21.32
November,2017	32.42	15.26	48.00	13.72	29.91	13.42	41.19	15.05
December,2017	36.28	12.05	49.25	9.07	37.69	8.84	22.38	9.05
November,2018	38.82	22.03	57.34	23.99	38.06	13.41	39.78	24.86
December,2018	39.43	12.79	30.26	10.90	40.19	11.03	47.11	15.41
October,2019	24.57	6.71	45.80	12.37	42.46	6.56	49.49	17.69
November,2019	68.86	20.76	55.23	24.73	42.34	10.85	57.14	13.44

Ahmedabad is the only metro where retail mark-ups have stayed at Rs. 2 per kg throughout the month even as wholesale prices have risen.

Onion prices usually rise in the last months of every year and 2019 is no exception (Table 8 and Fig. 4). This happened mainly due to the acute shortage of onion, caused mostly by late rains destroying the early *Kharif* harvest and disrupting storage and transport of even last season's *Rabi* stocks. The latest reports indicated that the retail prices of onion were hovering around Rs. 60-90/kg depending on the quality and grade. This has paralysed consumer budget meant for purchase of vegetables. Consumers, hotels and other institutional

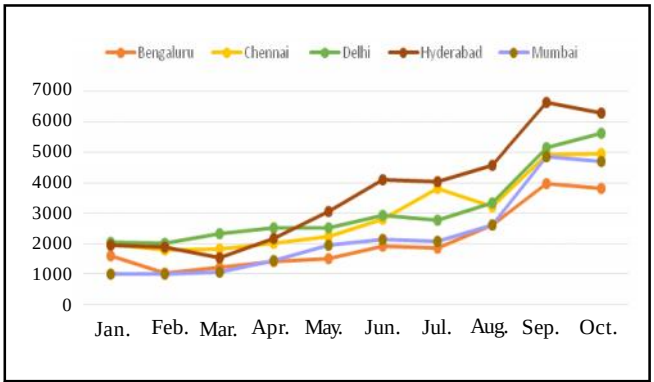

Fig. 4 : Monthly average retail prices (Rs./ qtl) of onion in 2019

Table 6 : Retail mark-up from Jan. 2016 to Aug. 2019 (%)

Metro	Average	Minimum	Maximum
Delhi	167.4	76.4	245.5
Pune	125.2	14.0	251.4
Mumbai	112.2	39.5	231
Chennai	56.1	32.9	84.7
Kolkata	41.3	14.7	66.7
Bengaluru	36.8	18.2	56.2
Hyderabad	27.3	8.3	45.5
Ahmedabad	20.7	8.7	36.4

Table 7: Retail mark-up (%) during September 2019

Market	Retail markup (%)
Delhi	102 - 107
Hyderabad	17 - 80
Chennai	20-70
Mumbai	45 -48
Ahmedabad, Kolkata and Pune, Bengaluru	< 30

Table 8: Every month average retail prices (Rs./qtl) of onion in 2019

Months	Bengaluru	Chennai	Delhi	Hyderabad	Mumbai
Jan.	1586	1965	2050	1938	1000
Feb.	1035	1774	2000	1875	1000
Mar.	1217	1819	2324	1521	1052
Apr.	1405	2017	2522	2157	1433
May	1513	2222	2523	3070	1957
June	1900	2808	2938	4104	2130
July	1859	3830	2767	4048	2062
Aug.	2625	3229	3338	4575	2595
Sep.	3978	4925	5167	6643	4881
Oct.	3825	4967	5625	6284	4708

Source : National Horticulture Board

buyers are hit hard to cope-up with the situation.

Trend in exports of onion in India:

India is a traditional exporter of fresh onions (Mathur, 2001). Soon after Independence in 1951-52 the country was exporting over 5,000 tonnes of onions worth Rs. 106.69 lakh. Over the years there has been a progressive increase in the exports of onion from India touched a level of 21,35,421 tonnes during the financial year of 2017-18 (Table 9 and Fig. 5). The large export is also one of the reasons for sudden spurt in the prices of onion during December 2010. During the financial year 2018-19, India had exported 21.82 lakh tonnes of the bulb.

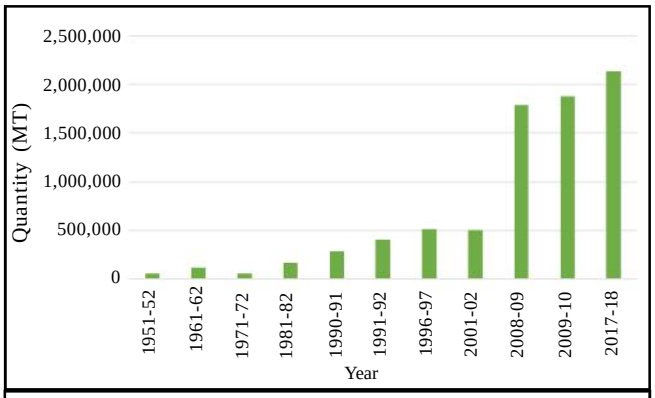

Fig. 5 : Trend in exports of onion in India

However, it is apparent from Table 9 that although there has been an increasing trend in the quantum and value of exports of onions from the country, the exports are subject to wide fluctuations from year to year. This may be attributed to the fact that the exports of onions have not been free but are canalised through National Agricultural Co-operative Marketing Federation (NAFED) and now through some other agencies. Such agencies are protecting the domestic consumer and producer from unduly high prices and gluts as well. The cause of fluctuations in the exports may be due to the occasional restriction put on exports (Sudhir, 2004), keeping in mind the domestic requirement. No doubt, exports of onion have fetched the country valuable foreign exchange and at the same time have been the reason for high domestic prices.

Conclusion:

Onion prices being a highly volatile, in the event of a high rise in the prices affect both consumer as well as farmers on account of high margin in the value chain being taken away by intermediaries. Hence, government is resorting to control the prices by releasing the stocks available with outlets of NAFED. The corrective measures for arresting rising prices in the form releasing the stocks in open market and increasing the MEP have always been resulted in lowering of prices in subsequent period. However, the impact of these measures lowers the prices of onion to such an extent they become uneconomical to the farmers. These policies seldom help the farmers and have not been able to contain the volatility of onion prices. Hence, there is a need for comprehensive policies which were going to benefit both producer as well as consumer. Extension adversaries for staggered sowing and intervention of procurement agencies either for releasing the stock during high rise and market operations during glut in a more plannedmanner

Table 9: Trend in exports of onion in India

Year	Qty. (MT)	Value (Rs.Lakh)	Price (Rs./Tonne)
1951-52	56,986	106.69	187.22
1961-62	1,14,023	291.3	255.47
1971-72	54,866	227.56	414.76
1981-82	1,69,771	2,943.81	1,733.99
1990-91	2,89,380	11,803.00	4,078.72
1991-92	4,06,135	16,296.86	4,012.67
1996-97	5,12,879	33,163.40	6,466.13
2001-02	5,06,924	41,140.53	8,115.72
2008-09	17,83,820	2,24,312.30	12,578.63
2009-10	18,73,002	2,83,428.50	15,132.31
2017-18	21,35,421	4,38,436	20531.59

Source: NAFED, DGCIS

will act as a panacea for volatility in onion prices.

In the recent media reports, there was a news on raids by I-T sleuths on onion traders for want of proper maintenance of the records. This suggest that few onion traders are indulged in creating artificial scarcity of onion and make a quick profit taking the advantage of rise in the price.This matter of curtailing by traders, hoarding of stocks and concentration of onion trade in the few hands was reported by Competition Commission of India in their report during 2012. Hence, there is a need for regulating onion trade and trade practices.The recent marketing reforms, providing alternative marketing systems and making onion as a part of Public Distribution System (PDS) may help in minimising volatility of onion prices.

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LITERATURE CITED :

Gummagolmath, K.C. (2013). *Research report on trends in marketing and export of onion in India*, National Institute of Agricultural Marketing (NIAM), Jaipur, Rajasthan, India.

Mathur, V. C. (2001). *Export potential of onion: A case study of India*, paper presented in "Regional Workshop on Commodity Export Diversification and Poverty Reduction in South and South-East Asia, held from 3-5 April 2001, at Bangkok, Thailand by UNCTAD and ESCAP.

Sudhir, B. (2004). Onion prices and state intervention, *Econ. & Politi. Weekly*, 14 August, 3684-3686.

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