



INTERNATIONAL RESEARCH JOURNAL OF HUMANITIES AND INTERDISCIPLINARY STUDIES

(Peer-reviewed, Refereed, Indexed & Open Access Journal)

DOI : 03.2021-11278686

ISSN : 2582-8568

IMPACT FACTOR : 6.865 (SJIF 2023)

TRENDS IN ARRIVALS & PRICES OF SELECTED AGRICULTURAL COMMODITIES IN APMC, SHRIRAMPUR

Rutvik Mahendra Patil

Final Year Student,

College of Agriculture Business Management,

Loni, Tal. Rahata, Dist. Ahmednagar (Maharashtra, India)

E-mail: rutvikpatil52@gmail.com

DOI No. **03.2021-11278686** DOI Link :: <https://doi-ds.org/doi/10.2023-69814149/IRJHISIC2302032>

Abstract:

The present study was conducted to access the trends in arrivals and prices of selected agricultural commodities in APMC, Shrirampur. The major objective of the research is to analyze trends in arrival and prices of the selected agriculture commodities. The trends in arrival and prices of selected agricultural commodities were worked out by using mathematical and statistical method. The trends in arrival and prices for selected commodities in APMC Shrirampur during April-2021 to March-2022 was depicted and fluctuated tremendously. The result indicates that, significant increase in arrivals of Soybean and Gram was seen. Whereas; significant decrease in arrivals of Bajara, Wheat and Maizewas noticed in the APMC, Shrirampur during study period (April-2021 – March-2022) The prices of all commodities were found to be significantly increased over entire period of study except Gram which stayed nearly constant.

Keywords: Trend, Arrivals, Price, APMC (Agriculture Produce Market Committee), Coefficient of Variation, Standard Deviation, CMGR.

1. INTRODUCTION:

The agricultural produce marketing committee is established by the state governments of India. The state government provides infrastructural facilities to farmers to sale their produce and get reasonable price. Most of APMC have market yard where traders and other marketing agents are provided godowns and shops for purchase of agriculture produce from farmers. Farmers can sale their produce to agents or traders under supervision of APMC. The price fluctuation in agricultural commodities is a common phenomenon due to seasonal nature of production. Agriculture is characterized by wide variation in the output of crops which subsequently lead to larger variation in market arrivals. Fluctuation in market arrivals largely contribute to price instability and price

fluctuation of agricultural commodities, there is needed to have an understanding of the price behaviour over time. It is said that next to rains, prices are greatest enemy of the farmer. The study of arrival and prices helps the farmer to find out the best time for marketing of agricultural commodities to secure higher price for their produce. Thus, it helps them to take decision regarding when to sale so as to obtain maximum price. The acreage under Wheat, Soybean, Gram, Maize and Bajara was substantial in Shrirampur region and the arrival of these commodities was remarkable. However, the fluctuations in arrivals and prices of their commodities were noticed in APMC, Shrirampur. But it is too essential to have stability in the prices and arrivals of these commodities. The present study was undertaken with a view to examine arrivals and prices of selected agricultural commodities in APMC, Shrirampur from the period of April-2021 till March-2022.

2. REVIEW OF LITERATURE:

H.P. THAKARE (2017) The price fluctuations in agricultural commodities are a common phenomenon due to their seasonal nature of production, wide ecological imbalances compared to other crops and seasonal demand for agricultural commodities. Agriculture is characterized by wide variations in the output of crops which subsequently lead to larger variation in market arrivals. **K.S.**

DAUNDKAR (2017) The market information relating to market prices and arrivals over a period of time helps the farmers to take decision about the future production pattern and sale of agricultural commodities in the market during specific period. **SAVITA R. RATHOD (2017)** The information of compound growth rates in annual arrivals and prices of wheat. It can be revealed from the table that, the annual compound growth rate of arrivals in case of wheat were found negative and prices were positive.

3. STATEMENT OF PROBLEM:

The problem of this study was about the price fluctuation in the major agriculture commodities in the Shrirampur region. Many producers' face the problem of low price for their commodity and are not satisfied by the price they receive. This study will analyze the effect of arrival on the price of the selected commodities.

4. OBJECTIVES OF THE STUDY:

1. To analyze trends in arrival and prices of selected agriculture commodities.
2. To examine the comparative study among the selected commodities.

5. RESEARCH METHODOLOGY:

The present study has based on the data of arrivals and prices of selected agricultural commodities in APMC Shrirampur for the period from April 2021 to March 2022. The secondary data pertaining to prices and arrivals for Wheat, Soybean, Maize, Gram and Bajara. The data was collected from selected Agricultural Produce Market Committee, Shrirampur.

• **Selection of Commodities: -**

The notified commodities traded in APMC, Shrirampur were more than 54. The following commodities were selected on the basis of their arrivals during the study year. All the following five commodities were among the most arrived grains commodities in selected APMC. Below table indicates the selected commodities for the project work.

Sr. No.	Commodities
1.	Wheat
2.	Soybean
3.	Maize
4.	Gram
5.	Bajara

6. RESULTS AND DISCUSSION:

Table No.1 Arrival and Price of selected agriculture commodities:

Month	Wheat		Soybean		Maize		Gram		Bajara	
	Avg.	Qt.	Avg.	Qt.	Avg.	Qt.	Avg.	Qt.	Avg.	Qt.
	Price	(Qt.)	Price	(Qt.)	Price	(Qt.)	Price	(Qt.)	Price	(Qt.)
April-21	1800	2020	5500	49	1200	386	4800	660	1250	60
May-21	1750	198	5500	21	1300	70	4750	150	1150	40
June-21	1771	1026	5700	154	1460	87	4400	641	1200	94
July-21	1625	470	6700	56	1600	13	4400	358	1200	15
Aug-21	1685	242	7000	30	1500	04	4700	384	1400	49
Sep-21	1825	537	6775	230	1400	24	4500	140	1410	82
Oct-21	1800	694	4800	2806	1300	106	4400	220	1600	48
Nov-21	1875	420	5700	1162	1475	693	4600	200	1575	49
Dec-21	1875	313	6000	1034	1475	722	400	160	1500	25
Jan-22	1750	88	6150	1075	1551	29	4200	68	1450	04

Feb-22	2000	201	6100	1715	1524	58	4400	309	1600	28
March-22	2250	407	7100	605	1550	14	4600	973	1725	01

(Source: - Complied report by APMC, Shrirampur)

Above table indicates the Average Price received and Quantity arrived for all the selected commodities for this project work between the period of April-2021 till March-2022. Soybean was most arrived commodity followed by Wheat. Whereas Soybean received the most price followed by Gram.

Table No.2 on basis of month wise arrival Arrival for selected commodities

Month	Wheat	Soybean	Maize	Gram	Bajara	Total Arrival
Apr-21	2020 (63.62%)*	49 (1.54)	386 (12.16)	660 (20.79)	60 (1.89)	3175
May-21	198 (41.34)	21 (4.38)	70 (14.61)	150 (31.32)	40 (8.35)	479
Jun-21	1026 (51.25)	154 (7.69)	87 (4.35)	641 (32.02)	94 (4.70)	2002
Jul-21	470 (51.54)	56 (6.14)	13 (1.43)	358 (39.25)	15 (1.64)	912
Aug-21	242 (34.13)	30 (4.23)	04 (0.56)	384 (54.16)	49 (6.91)	709
Sep-21	537 (53.01)	230 (22.70)	24 (2.37)	140 (13.82)	82 (8.09)	1013
Oct-21	694 (17.91)	2806 (72.43)	106 (2.74)	220 (5.68)	48 (1.24)	3874
Nov-21	420 (16.64)	1162 (46.04)	693 (27.46)	200 (7.92)	49 (1.94)	2524
Dec-21	313 (13.89)	1034 (45.87)	722 (32.03)	160 (7.10)	25 (1.11)	2254
Jan-22	88 (6.96)	1075 (85.05)	29 (2.29)	68 (5.38)	04 (0.32)	1264
Feb-22	201 (8.70)	1715 (74.21)	58 (2.51)	309 (13.37)	28 (1.21)	2311
Mar-22	407 (20.35)	605 (30.25)	14 (0.70)	973 (48.65)	01 (0.05)	2000

(Source: - Complied report by APMC, Shrirampur)

*Note: - (... %) Bracket indicates the percentage share of that commodity of the total arrival in particular month.

Above table indicates the month wise percentage share of each commodity of the total arrival in particular month. For e.g., in April-2021 the total arrival for all the selected commodities was 3175 quintals, of this 2020 q. was of Wheat which is 63.62% of arrival of selected commodities whereas remaining four commodities accounted for only 36.38% of arrival. This means Wheat had dominating arrival than any other selected commodities.

It can be clearly seen that from April-21 till July-21 wheat was the most arriving commodity in Shrirampur APMC. It declined a bit in Aug-21 and again topped in arrival in Sep-21. Later on, arrival of wheat declined till Feb-22 and again had a spike in March-22 till 20.35%. Arrival of wheat as major commodity in first half could have been due to the harvest period which is mainly between February to April.

Soybean was the most arrived commodity from Oct-21 till Feb-22. This can be due the harvest season of soybean which is mostly post-monsoon. Even in March-22 it was the second highest arrived commodity in Shrirampur APMC. Whereas in between April-21 to Aug-21 the arrival of soybean was very limited. Soybean is the most arrived oilseed in APMC.

In the month of Nov-21 and December-21 Maize was the second most arrived commodity in market. It was higher due to the post-harvest period of maize. Majorly many farmers in the adjoining area are engaged in Dairy industry as a result they are making silage of maize instead of grains. This has also affected the arrival of maize.

Gram was the second most arriving commodity in between April-21 to Aug-21. Whereas in the month March-22 it was the most arrived commodity. We can see that the post-harvest period has more arriving for Gram too. Gram is rabi crop and is harvested in month of March and April.

Due to the changing cropping pattern millets like Bajara has been limited in plantation and as a result its arrival in the APMC is least among the other commodities. Bajara always was the last or second last arrived commodity among the selected throughout the year.

Table No.3 On basis of month wise price received for selected commodities.

Month	Wheat	Soybean	Maize	Gram	Bajara	Total Price (Rs.)
Apr-21	1800 (12.37%)*	5500 (37.80)	1200 (8.25)	4800 (32.99)	1250 (8.59)	14550
May-21	1750 (12.11)	5500 (38.06)	1300 (9.00)	4750 (32.87)	1150 (7.96)	14450
Jun-21	1771 (12.19)	5700 (39.23)	1460 (10.05)	4400 (30.28)	1200 (8.26)	14531
Jul-21	1625 (10.47)	6700 (43.16)	1600 (10.31)	4400 (28.34)	1200 (7.73)	15525
Aug-21	1685 (10.35)	7000 (42.98)	1500 (9.21)	4700 (28.86)	1400 (8.60)	16285
Sep-21	1825 (11.47)	6775 (42.58)	1400 (8.80)	4500 (28.28)	1410 (8.86)	15910
Oct-21	1800 (12.95)	4800 (34.53)	1300 (9.35)	4400 (31.65)	1600 (11.51)	13900
Nov-21	1875 (12.32)	5700 (37.44)	1475 (9.69)	4600 (30.21)	1575 (10.34)	15225
Dec-21	1875 (12.63)	6000 (40.40)	1475 (9.93)	4000 (26.94)	1500 (10.10)	14850
Jan-22	1750 (11.59)	6150 (40.73)	1551 (10.27)	4200 (27.81)	1450 (9.60)	15101

Feb-22	2000 (12.80)	6100 (39.04)	1524 (9.75)	4400 (28.16)	1600 (10.24)	15624
Mar-22	2250 (13.06)	7100 (41.22)	1550 (9.00)	4600 (26.71)	1725 (10.01)	17225

(Source: - Complied report by APMC, Shrirampur)

*Note: - (... %) Bracket indicates the percentage share of that commodity of the total mean price received in particular month.

Above table indicates the month wise percentage share of each commodity of the mean price received in particular month. For e.g., in April-2021 the total mean price received for all the selected commodities was Rs.14550, of this Rs.5500 was received by Soybean which is 37.22% of total price

Sr. No.	Commodity	-	Mean (Average)	Std. Deviation	Coefficient of Variation (%)
1.	Wheat	Arrivals	1017.85	527.63	51.84
		Price	1833.83	162.46	8.86
2.	Soybean	Arrivals	1374.92	862.53	62.73
		Price	6085.42	698.41	11.41
3.	Maize	Arrivals	339.38	265.24	78.15
		Price	1444.58	121.23	8.39
4.	Gram	Arrivals	655.85	271.46	41.39
		Price	4179.16	1202.92	28.78
5.	Bajara	Arrivals	76.15	28.76	37.77
		Price	1421.66	187.86	13.21

Table No.4 on basis of Standard Deviation & Coefficient of Variation
 (Source: - Complied report by APMC, Shrirampur)

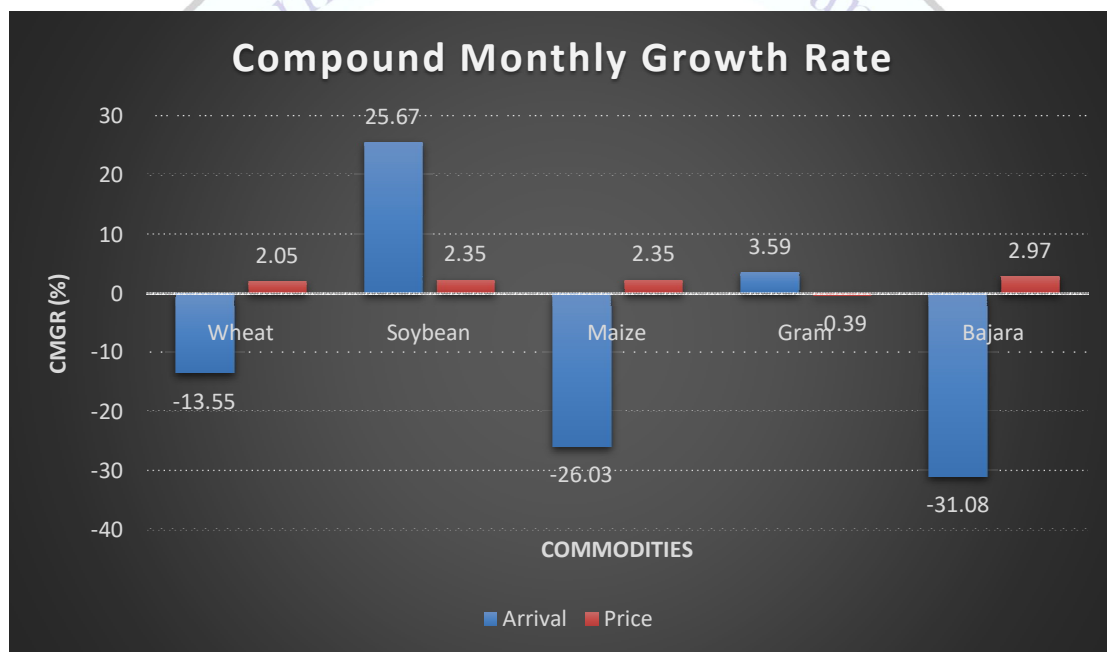
Soybean has received the most price among the all-selected commodities throughout the year from April-21 to March-22. Lowest price received for soybean was in Oct-21 which was Rs.4800 whereas highest was in March-22 accounting for Rs.7100. Total price received was overall accounted for 39.87%.

Gram has received second most price followed by wheat at number three. Among other commodities Bajara had received lowest price and its price was almost constant. While Maize was also having relatively low price.

It is seen that in arrival the most standard deviation is of 862.53 for Soybean followed by Wheat (527.63), Gram (271.46) and Maize (265.24). Whereas Bajara has the least standard deviation which is 28.76. Standard Deviation in price is maximum for Gram (1202.92) followed by Soybean, Bajara, Wheat and Maize respectively.

Coefficient of Variation shows that how much the value has deviated from the mean and it is expressed in percentage. For arrival the Coefficient of variation is highest for Maize (78.15%) followed by Soybean (62.73%), Wheat (51.84%) and Gram (41.39%). Bajara has the lowest % CV i.e., 37.77%. CV in price is highest for Gram (28.78%) and lowest for Maize (8.39%).

Figure No.1 Compounded Monthly Growth Rate (CMGR) for arrivals and price received for selected commodities



(Source: - Complied report by APMC, Shrirampur)

Soybean had the highest arrival growth rate of 25.67% throughout the year from April-21 to March-22. Gram was also having a positive growth rate of 3.59%. Whereas other three commodities Wheat (-13.55%), Maize (-26.03%) and Bajara (-31.08%) had the negative growth in arrival of specified commodities. Arrival has fluctuated on huge scale.

Price for Gram (0.39%) has fluctuated very less as compared to other four commodities. Price for Gram was almost constant throughout all the months. Whereas Bajara (2.97%) had the highest fluctuated price as compared to others. Wheat, Soybean and Maize had fluctuation of 2.05%, 2.35% & 2.35% respectively.

Overall, Fluctuations in the arrivals were more in all commodities except Gram. Price fluctuation is less as compared to arrival in Shrirampur APMC. We can interpret that the arrivals do not have much effect on the price.

7. CONCLUSION:

1. The significant growth in the arrival of Soybean was recorded in the selected APMC, Shirampur followed by Gram during the study period of April-2021 till March-2022.
2. The APMC reported significantly decreased growth for Wheat, Maize and Bajara during study period.
3. The price for all the selected commodities except gram has evenly increased. Gram has received less price related to other commodities.
4. In arrival Soybean has the most deviation in relation to the mean whereas it is highest for Gram to the price received.

8. REFERENCE:

1. H.P. THAKARE, K.S. DAUNDKAR (2017) Changes and trends in arrival and prices of agricultural commodities in APMC Kolhapur market.
2. AA DHENDE, RR SURYAWANSHI (2020) Trends in arrivals and prices of selected agricultural commodities in APMC, Sangli.
3. N. KUMARASAMY (2022) Trends in Arrivals and Prices of Selected Agricultural Commodities in APMC, Erode District.

