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Market Dynamics of Groundnut in Karnataka, India: A Study on Price and Arrival Instability

Bhoomika [a++*], Jainuddin S M [a#] and Shiva Kumar [b†]

[a] Department of Agriculture Economics, College of Agriculture, University of Agricultural Sciences, Raichur -584104, Karnataka, India.
[b] Department of Agriculture Economics, University of Agricultural Sciences, GKVK, Bengaluru -560092, Karnataka, India.

Authors' contributions

This work was carried out in collaboration among all authors. All authors read and approved the final manuscript.

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ABSTRACT

The nature and supply of agricultural products generally results in instability of prices and income within agricultural sector as well as in other sectors of the economy. Groundnut is a major oilseed crop contributing around 25.14 per cent of the total oilseeds production in the country during 2021-22. The present study aimed to analyze the growth and instability of groundnut arrivals and prices in Karnataka using monthly price and arrivals data of groundnut (2002- 2022). The secondary data were collected from published reports of APMC's, Krishimaratavahini etc. For the study top ten

[++] *Research Scholar;*
[#] *Assistant Professor;*
[†] *Ph.D Scholar;*
**Corresponding author: Email: bhoomikasangolage@gmail.com;*

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groundnut markets such as Yadgir, Laxmeshwar, Raichur, Ballari, Challakere, Hubbali, Gadag, Mundargi, Chitradurga and Kottur were selected based on groundnut arrivals. The results of the study depicted that majority of the markets had shown a higher growth rate in market prices in the months of August, September and March which coincided with the offseason of groundnut and standing crop period. Groundnut arrivals were higher during the period of September to April and reduced during the period of May to August month in all the markets. This may be due to fluctuations in groundnut production and also changing the cropping pattern to other profitable crops. The study shows that there existed different levels of variability in groundnut market arrivals and this variability can be attributed to a range of factors including seasonal agricultural practices, market demand, weather conditions, transportation and local economic factors. The pattern of variation in groundnut market prices in all the markets showed a moderate degree of variation and was more stable across the months, which indicated a relatively consistent pattern of prices. The lowest variation in market arrivals from November to December might be due to the sowing period of groundnut in the study area. It is suggested to establish sufficient storage facilities. It may help farmers to store their part of the produce during harvest season and to sell their produce during the subsequent months for better price realization by reducing the glut in the market and to achieve stable market prices.

Keywords: Market arrivals; market prices; compound annual growth rate; coefficient of variation.

1. INTRODUCTION

Groundnuts offer a diverse array of nutrients and bioactive compounds that contribute to overall health. Incorporating them into the diet can be beneficial. With respect to nutritional composition groundnuts are a rich source of essential nutrients. They contain high-quality proteins, dietary fiber, vitamins, and minerals. Proteins in groundnut provide essential amino acids, making them valuable for overall health and the dietary fiber in groundnut is associated with reducing obesity risk and cardiovascular disease (Biradar et al., 2024). Price is the amount of money that has to be paid to acquire a given product. It can be called as an indicator of economic growth. The market price is the price prevailing in the market. This price change also depends on the nature of the commodity. The price of agricultural produce in the market is influenced by its arrivals (supply) to the market. Indian agriculture system is characterised by its varied seasonal production of crops which lead to wider fluctuation in market arrivals. The extent of fluctuation in market arrivals largely contributes to the price variability of major crops. According to the economic theory, demand and supply are the two market forces which influence the market. The market arrivals of agricultural produce not only depend on the price prevailing in the market but also other factors like production (Kolageri & Banakar, 2018). Groundnut marketing and market channel choice are constrained by limited numbers of traders and market agents, inadequate transportation network, the inadequacy of institutional services, low bargaining power of producers, price instability, lack of well-organized and coordinated market channel, lack of storage facilities, poor-quality mechanism, domination of few market channels, absence of groundnut processors around the study area and weak market information (Bhoomika et al., 2025).

The nature and supply of agricultural products generally result in instability of prices and income within the agricultural sector as well as in other sectors of the economy. On demand side, the instability in the prices of agricultural commodities has been one of the major factors affecting the income level of the farmers as well as the tempo of agricultural production. This instability in the price of agricultural commodities is influenced by number of factors such as annual variation in production and low price elasticity of agricultural production (Kahlon & Tyagi, 1989).

Oilseed crops have been the backbone of the agricultural economy of India from time immemorial. Today, these crops are cultivated on about 291.7 lakh hectares with total production of 379.63 lakh tonnes (Anon, 2022b). This area constitutes approximately one-tenth of the total cultivated area in India. Groundnut is a major oilseed crop contributing around 25.14 per cent of the total oilseeds production in the country during 2021-22. Among the states, Gujarat is the largest producer and contributes around 40 percent of the total production, followed by Rajasthan (19 %), Tamilnadu (9 %), Andhra Pradesh (8 %) and Karnataka (Anon, 2022a).

In Karnataka, area under the groundnut crop was about 5.90 lakh hectares and stands in fifth position contributing seven per cent to the total production of groundnut in India. The predominant groundnut growing districts are Chitradurga (1.6 lakh hectares) and Tumkuru (0.88 lakh hectares), which accounted for about 43 percent of the total area of the state. In Kalyana Karnataka region, Ballari district ranks first in production and area with 79310 tonnes and 60415 hectares respectively followed by Yadgir district. The productivity of the groundnut is highest in Kalaburgi district with 1423 kg/ha (Anon, 2023). The objective of the study is to analyze the growth and instability of groundnut prices.

2. METHODOLOGY

Source of data:

The study was conducted in the state. The top ten groundnut markets for the study were selected based on the triennium average (2019-20, 2020-21 and 2021-22) of market arrivals. The secondary data for about 20 years (2002-03 to 2021-22) related to market arrivals and prices of groundnut crops at the district level was obtained from the respective APMC's district statistical officer and various reports published by DES, Bangalore. Among the agricultural markets in the state, the top ten major groundnut markets were selected based on the highest market arrivals viz, Yadgir, Laxmeshwar, Raichur, Ballari, Challakere, Hubballi, Gadag, Mundargi, Chitradurga and Kottur.

Analytical tools:

The analytical tool used in the study are:

Compound growth rate analysis:

The Compound Annual Growth Rate technique was used to calculate the growth rate of market arrivals and prices in the different markets.

$$Y = a\, b^{t}\, e^{ut}$$

Where,
a = Intercept
b = Regression coefficient
t = Time period
ut = Disturbance term
The compound growth rate is calculated by ordinary least square technique. Equation is written in log form as below

$$\ln Y = \ln a + t \ln b + Ut$$

Where,
b = ln (1+r)
r = Compound annual growth rate
r = {Antilog (ln regression coefficient) - 1} X 100

Coefficient of variation (CV):

The coefficient of variation was used as a measure to study the variability in arrivals and modal price of selected commodities in the selected markets. The coefficient of variation was computed by using the below formula.

$$Coefficient\ of\ variation(cv) = \frac{Standard\ deviation(\sigma)}{Mean(\bar{X})} \times 100$$

3. RESULTS AND DISCUSSION

3.1 Growth Rate in Groundnut Prices in the Selected Markets

Table 1 presents the compound annual growth rate of groundnut prices in Karnataka. From the table, it is evident that the annual growth rate of all the markets was in the range of 6.16 to 9.11 per cent per annum, except Kottur market in June (5.57 % per annum) month. The results of the table depicted that growth rate of the market price of groundnut increased irrespective of groundnut market arrivals. The growth rates in the market price of groundnut was higher in Challakere (9.11%) in the month of September followed by Chitradurga (9.10 %) and Raichur (8.82 %) during August. The highest growth rate during August and September might be due to low market arrivals of groundnut because of the standing crop period.

The annual growth rate in the market prices of groundnut was highest in Yadgir market during January (8.32 %) and December (8.31 %) month, Laxmeshwar market during June (7.61 %) and September (7.41 %) month, Raichur during August (8.82 %) and January (8.42 %) month, Ballari during July (8.00 %) and February (7.96 %) month, Challakere and Hubballi during September, August and March month, Gadag during September (7.24 %) and April (7.18 %), Mundargi during March (8.12 %) and September (8.06 %) month, Chitradurga during August (9.10 %) and June (8.91 %) months and Kottur market in September (8.46 %) and August (8.30 %) months respectively.

Table 1. Growth rate of groundnut market price in the selected markets during 2002-2022

(Per cent)

Months	Yadgir	Laxmeshwar	Raichur	Ballari	Challakere	Hubballi	Gadag	Mundargi	Chitradurga	Kottur
Jan	8.32*	6.90*	8.42*	7.47*	7.20*	6.62*	6.53*	7.11*	7.32*	7.12*
Feb	7.97*	6.60*	8.37*	7.96*	7.93*	6.70*	6.68*	7.79*	7.37*	7.70*
Mar	8.02*	7.14*	8.10*	7.85*	8.42*	6.84*	6.99*	8.12*	7.97*	8.05*
Apr	7.49*	6.90*	7.59*	6.19*	8.27*	6.78*	7.18*	6.98*	7.67*	7.47*
May	7.57*	6.98*	7.46*	7.29*	8.05*	6.27*	7.11*	7.85*	8.37*	8.13*
Jun	7.11*	7.61*	7.20*	7.27*	7.61*	6.16*	6.73*	7.84*	8.91*	5.57*
Jul	7.00*	6.80*	8.23*	8.00*	7.68*	6.20*	6.83*	7.47*	8.71*	7.77*
Aug	7.49*	6.29*	8.82*	7.79*	8.42*	6.79*	6.97*	7.80*	9.10*	8.30*
Sep	7.20*	7.41*	8.35*	8.39*	9.11*	7.56*	7.24*	8.06*	7.88*	8.46*
Oct	6.40*	7.01*	7.48*	7.50*	7.94*	6.67*	6.83*	7.59*	7.53*	8.05*
Nov	7.49*	6.57*	7.12*	6.85*	7.30*	6.46*	6.45*	7.36*	7.52*	6.89*
Dec	8.31*	6.21*	7.47*	7.34*	7.57*	6.55*	6.46*	7.11*	7.44*	6.88*

*Note: *Significance at 5 per cent level of significance*

Table 2. Growth rate of groundnut market arrivals in the selected markets during 2002-2022

(Per cent)

Months	Yadgir	Laxmeshwar	Raichur	Ballari	Challakere	Hubballi	Gadag	Mundargi	Chitradurga	Kottur
Jan	24.66*	7.28**	7.45*	-6.20*	-4.85	11.20*	-2.15	6.28*	48.01*	-2.79
Feb	28.58*	5.42	5.37*	4.71	-3.91	11.14	1.21	11.86*	39.86*	0.64
Mar	18.00*	7.33*	-1.07	9.46*	4.80	9.95	3.20	17.94*	38.36*	10.43*
Apr	4.71	19.35*	-6.39*	7.78*	5.95	0.17	1.95	15.04*	41.37*	3.22
May	2.00	14.48*	-8.78*	-4.38	0.35	-10.20*	-3.64	5.18	25.99	-7.55*
Jun	0.15	11.36*	-2.53	-6.91	-5.56*	-8.17*	-2.84	3.84	33.19*	-9.86*
Jul	6.70	5.11	-3.33	0.82	-13.41*	-2.80	-2.54	2.05	26.39*	-5.31
Aug	4.73	1.36	-11.27*	6.46	-0.74	3.78	-10.07	9.67*	38.08*	4.53
Sep	-12.26*	11.42	-11.71*	19.14*	6.82	-4.26	1.23	12.10*	42.95*	10.89*
Oct	-24.27*	12.29*	-11.59*	19.90*	8.14*	-0.57	-1.43	8.24*	38.84*	5.41
Nov	-19.73*	7.34*	-14.20*	7.64*	-0.10	3.28	-1.45	9.52*	36.17*	-4.59*
Dec	-9.41	6.03*	-4.15	-1.50	-4.29	5.08	-5.51**	6.35*	34.85*	-6.95*

*Note: *Significance at 5 per cent level of significance*

The results of the study depicted that the majority of the markets had shown a higher growth rate in market prices in August, September and March which coincided with the offseason of the groundnut and standing crop period. These results are supported by Dudhat *et al*. (2021) in Bt cotton. The results of the study are also in line with the results of Devi and Parmar (2022), who reported that market prices in soybeans had less growth rate during the harvest season.

3.2 Growth Rate in Groundnut Arrivals in the Selected Markets

Table 2 represents the compound annual growth rate of groundnut market arrivals in the selected markets in Karnataka. It was seen from the table that many markets had shown positive growth rates, indicating consistent growth in market arrivals of groundnut. The markets such as Chitradurga, Laxmeshwar and Mundargi exhibited positive growth during all the months. CAGR of groundnut market arrivals across the different markets showed that in Chitradurga the growth rate in market arrivals of groundnut was maximum (48.01 %) during the month of January and the lowest growth rate was observed during the month of May (25.99 %). In case of Laxmeshwar market, the highest growth rate was observed in April (19.35 %) month and the lowest growth rate was seen in August (1.36 %) month, whereas in case of Mundargi market, the highest growth rate was noticed in March (17.94 %) and lowest growth rate was seen in July (2.05 %) month. The negative growth rate in market arrivals was observed in Raichur market except January (7.45 %) and February (5.37 %) months.

In case of Yadgir market highest growth rate was noticed in February (28.58 %) month and a negative growth rate in October (-24.27 %) month. Similarly, in case of Ballari market, market arrivals increased during September (19.14 %) and decreased in June (-6.91%), Challakere market has also shown increased trend in October (8.14 %) and reduced during July (-13.41 %). However similarly in Hubballi market, market arrivals increased during January (11.20 %) and reduced during May (-10.20 %) month, Gadag market had larger arrivals during March month (3.20 %) and decreased during August (-10.07 %) and in Kottur market larger arrivals were found in September month (10.89 %) and decreased during June (-9.86 %) month.

The results indicated that groundnut arrivals were higher during the period of September to April and reduced during the period of May to August in all the markets. The highest and lowest growth rates in the market arrivals may be due to fluctuation in groundnut production and also may be due to changing cropping patterns to other profitable crops. The study concluded that the presence of both positive and negative growth rates highlights the inherent volatility and fluctuations in groundnut market arrivals. These results are supported by Devi and Parmar (2022) who reported that there was no uniformity in arrivals within the study period due to fluctuating production which was mainly due to weather conditions and also due to farmers selling their produce in local markets in the study area.

3.3 Instability of Groundnut Prices in the Selected Markets

The price variability of groundnuts in different markets is represented in Table 3. The price fluctuation measured in terms of CV across the different markets showed that the highest variability was noticed during September month in almost all markets like Laxmeshwar (45.19 %), Ballari (48.71 %), Challakere (51.03 %), Hubballi (44.57 %), Gadag (41.83 %) and Kottur (49.60 %) respectively except Yadgir, Raichur, Mundargi and Chitradurga markets where highest price variation was observed in December (55.37 %), January (49.27 %), March (48.61 %) and August (50.16 %) markets respectively. It might be due to the highest average market price in the month of September attributed to the low market arrivals during the offseason of the groundnut crop.

The table also revealed that the lowest price variation was noticed in Yadgir and Hubballi markets in June (40.74 % and 37.68 % respectively). Similarly, in Laxmeshwar, Raichur, Ballari, Challakere, Gadag, Mundargi, Chitradurga and Kottur markets, lowest price variation observed in December (39.21 %), November (40.86 %), April (39.88 %), January (42.38 % and 38.66 % respectively), April (41.61 %), February (41.87 %) and November (41.45 %) respectively. The lowest price variation in these markets might be due to lower market price received for sale of the groundnut crop in the respective markets in the study area. The pattern of variation in groundnut market prices in all the markets showed a moderate degree of variation and was more stable across the months, which indicated a relatively consistent pattern of prices.

Table 3. Instability in market prices of groundnut in the selected markets during 2002-2022

Months	Yadgir		Laxmeshwar		Raichur		Ballari		Challakere		Hubballi		Gadag		Mundargi		Chitradurga		Kottur	
	Mean	C.V (%)	Mean	C.V (%)	Mean	C.V (%)	Mean	C.V (%)	Mean	C.V (%)	Mean	C.V (%)	Mean	C.V (%)	Mean	C.V (%)	Mean	C.V (%)	Mean	C.V (%)
Jan	3345.14	48.05	2887.33	40.75	3232.71	49.27	3227.95	43.44	3094.57	42.38	2870.33	40.21	2924.61	38.66	2878.14	42.99	3377.05	42.45	3194.19	42.09
Feb	3484.86	44.47	2890.05	39.37	3426.38	46.34	3412.90	45.87	3281.81	47.01	2792.10	39.74	2914.14	39.71	3148.19	47.30	3251.48	41.87	3211.29	46.99
Mar	3565.53	45.20	3002.16	42.59	3609.19	45.73	3628.00	45.39	3475.48	49.64	2758.67	42.82	3060.38	41.22	3465.19	48.61	3331.62	46.80	3425.57	48.55
Apr	3437.24	42.41	3155.89	41.85	3602.52	43.63	3742.10	39.88	3419.29	47.64	2806.38	42.38	3142.57	41.24	3569.67	41.61	3359.29	44.04	3447.90	43.45
May	3327.82	42.20	3171.64	42.20	3559.52	43.07	3587.43	41.62	3441.00	46.04	2925.76	38.71	3169.00	40.78	3555.24	45.11	3402.24	45.75	3454.24	46.26
Jun	3336.39	40.74	3001.29	44.34	3370.81	41.14	3568.24	42.31	3421.05	43.85	2936.33	37.68	3200.86	39.74	3567.00	45.12	3360.81	45.51	3763.38	42.32
Jul	3276.42	41.76	3002.76	41.74	3093.33	46.49	3604.52	45.75	3404.38	45.15	2900.86	39.34	3321.95	41.00	3598.29	43.56	3262.71	47.11	3474.93	44.89
Aug	3242.29	43.70	2885.86	39.57	3115.10	48.32	3754.00	45.78	3560.83	48.37	2794.86	39.88	3300.71	41.57	3505.86	44.56	3091.36	50.16	3471.86	48.15
Sep	2973.33	46.18	3091.29	45.19	3170.95	47.39	3844.81	48.71	3609.24	51.03	2922.48	44.57	3172.05	41.83	3388.05	47.74	3384.90	49.60	3213.83	49.60
Oct	2613.17	44.27	3297.57	41.83	2927.43	43.27	3613.29	43.27	3424.62	46.77	3394.57	42.18	3268.71	41.24	3467.52	45.39	3323.40	45.12	3374.19	48.62
Nov	2730.09	47.36	3095.14	39.81	3192.76	40.86	3467.14	41.40	3320.95	42.42	3321.10	39.78	3198.69	38.71	3484.14	44.30	3506.71	43.29	3540.43	41.45
Dec	3003.81	55.37	3031.43	39.21	3212.29	45.08	3492.10	44.45	3335.81	45.24	3198.33	41.36	3112.02	39.28	3173.38	43.01	3567.38	44.02	3535.71	42.47

Table 4. Instability in market arrivals of groundnut in the selected markets during 2002-2022

Months	Yadgir		Laxmeshwar		Raichur		Ballari		Challakere		Hubballi		Gadag		Mundargi		Chitradurga		Kottur	
	Mean	C.V (%)	Mean	C.V (%)	Mean	C.V (%)	Mean	C.V (%)	Mean	C.V (%)	Mean	C.V (%)	Mean	C.V (%)	Mean	C.V (%)	Mean	C.V (%)	Mean	C.V (%)
Jan	34240.71	100.53	7920.52	84.19	15683.43	70.54	3192.67	95.40	18595.14	72.97	1842.71	109.51	9146.95	62.68	2629.57	54.95	4225.81	92.70	2867.14	69.17
Feb	184271.52	73.85	3924.41	83.08	46631.86	55.85	1908.29	127.04	6858.95	136.04	494.76	143.61	3898.10	93.98	1866.62	87.17	731.76	114.12	677.33	101.91
Mar	108520.19	97.45	2793.98	95.77	49030.62	29.98	2347.14	103.74	3574.07	60.92	189.81	109.05	3162.14	96.45	3615.57	100.44	329.12	131.85	1420.24	138.87
Apr	37407.63	148.66	5002.17	118.56	38236.81	55.78	3010.00	121.23	3629.14	66.66	361.76	75.33	4058.67	56.79	8979.95	70.97	885.38	132.39	6129.76	64.35
May	11909.68	144.40	6387.57	89.63	9701.67	120.56	2427.67	93.29	3893.33	53.56	4543.95	67.52	9017.95	74.19	9219.67	78.96	878.90	101.19	8120.71	98.60
Jun	3493.96	145.44	3696.38	131.71	1853.62	73.96	1823.71	109.54	3513.81	48.36	2814.90	94.55	5657.81	85.41	3575.33	101.58	375.81	142.36	2564.19	89.89
Jul	788.32	173.44	799.95	140.29	1871.48	53.86	1014.95	111.56	2656.48	117.31	438.38	122.60	1580.71	63.64	1031.00	116.89	70.43	141.35	434.87	120.69
Aug	434.09	130.62	290.62	141.07	6152.33	83.24	2720.81	162.31	2584.14	108.03	67.57	111.78	938.81	138.48	474.00	116.42	248.40	150.38	404.70	173.99
Sep	695.38	186.81	6264.00	108.91	6823.86	92.62	3104.38	186.03	3549.76	92.23	11689.48	85.94	17739.24	79.47	632.71	97.24	2228.76	105.96	1402.55	175.01
Oct	1809.89	152.20	14937.33	91.65	4836.71	76.68	4514.57	138.46	5964.05	73.39	50116.38	54.45	29850.00	87.73	2146.33	67.25	2331.67	108.39	3110.86	71.98
Nov	1062.63	135.59	8850.95	103.33	3920.52	97.37	11713.76	80.73	20303.33	82.03	29400.14	58.60	11459.33	50.90	2890.57	63.21	7085.76	88.90	13837.76	51.42
Dec	699.90	154.42	12001.71	66.59	2283.05	86.53	10557.95	57.43	30266.62	73.35	8679.67	76.89	14843.52	55.53	3521.67	51.75	11415.76	74.51	9638.57	58.44

These results are in line with Kumar *et al.* (2005), who reported that price variation was more during the main season in most of the north Indian states and was lower during the lean season of August-September. Sarkar *et al.* (2021) reported that in all markets, price volatility was less and the values were significantly low as compared to market arrivals.

3.4 Instability of Groundnut Arrivals in the Selected Markets

Table 4 represents the variability of groundnut market arrivals in Karnataka. The variability in market arrivals may be due to the highest fluctuations in arrivals of groundnut which ranged between 67.57 quintals to 184271.52 quintals. The table showed that Raichur and Gadag markets had stability in groundnut arrivals in all the months except May (120.56 %) and August (138.48 %) months. Yadgir, Raichur and Mundargi showed the highest average arrivals from January to May months while Laxmeshwar, Ballari, Challakere, Hubballi, Gadag, Chitradurga and Kottur showed the highest arrival during the period of September to January which was the peak period for market arrivals. But the lowest average arrivals were found in August month in most of the markets i.e., Yadgir, Laxmeshwar, Challakere, Hubballi, Gadag, Mundargi and Kottur markets except Raichur, Ballari and Chitradurga markets due to the period of standing crop and arrivals being limited.

The results of the Coefficient of variation also revealed that the highest variation in market arrivals was noticed in Yadgir (186.81 %), Ballari (186.03 %) and Kottur (175.01 %) markets in September month. Similarly, in the month of August highest variation in market arrivals was seen in Laxmeshwar (141.07 %), Gadag (138.48 %) and Chitradurga (150.38 %) markets. The (136.04 %) and Hubballi (143.61 %) showed the highest variation in February month whereas Raichur (120.56 %) and Mundargi (116.89 %) in May and July month showed higher variation in arrivals, indicating significant and notable variability. It could also be seen from the table that the lowest variation in market arrivals was found in December in markets viz, Laxmeshwar, Ballari, Mundargi and Chitradurga, November month exhibits in Gadag and Kottur markets. The lowest variation in market arrivals during November to December might be due to the sowing period of groundnut in the study area.

The study shows that there existed different levels of variability in groundnut market arrivals and this variability can be attributed to a range of factors, including seasonal agricultural practices, market demand, weather conditions, transportation and local economic factors. Understanding these variations and trends is crucial for market participants, policymakers and stakeholders in the agriculture sector to make informed decisions and anticipate potential changes in groundnut market arrivals. Similar results were found in the study by Sarkar *et al., (*2021) who revealed that the maximum arrival was noted in the season of harvesting or post harvesting (February-April) and arrival was lowest in the time of sowing and pre-sowing period i.e., September to December. Strategies such as improving market access, implementing price stabilization mechanisms, enhancing infrastructure and storage, promoting quality standards and certification, strengthening institutional support, and leveraging digital solutions can significantly enhance the efficiency and effectiveness of groundnut marketing revealed by Seevagasinthamani et al., (2024).

4. CONCLUSION

All the months have shown moderate degree of increasing price in groundnut irrespective of groundnut production. The presence of both positive and negative CAGR values highlights the inherent volatility and fluctuations in groundnut market arrivals. These were mainly influenced by various factors, including government policies, technological advancements in agriculture, weather conditions, and market demand. This data can be valuable for agricultural planning, market forecasting and decision making for stakeholders involved in the groundnut industry. All the markets have shown a moderate degree of variation which indicates a relatively consistent pattern of prices. The data shows the different market experiences varying levels of variability in groundnut market arrivals and this variability can be attributed to a range of factors, including seasonal agricultural practices, market demand, weather conditions, transportation and local economic factors. Understanding these variations and trends is crucial for market participants, policy makers and stakeholders in the agriculture sector to make informed decisions and anticipate potential changes in groundnut market arrivals.

The study showed that the larger fluctuation was found in market arrivals in all the markets, which indicated the insufficient storage facilities with the farmers in the study area. Hence, it is suggested

to establish sufficient storage facilities. It may help farmers to store their part of the produce during harvest season and to sell their produce during the subsequent months for better price realization by reducing the glut in the market and to achieve stable market prices.

DISCLAIMER (ARTIFICIAL INTELLIGENCE)

Author(s) hereby declare that NO generative AI technologies such as Large Language Models (ChatGPT, COPILOT, etc) and text-to-image generators have been used during writing or editing of this manuscript.

COMPETING INTERESTS

Authors have declared that no competing interests exist.

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