"Turmeric Marketing: Arrivals and price Trend analysis- Chamarajnagar District of Karnataka"

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Abstract

Turmeric arrivals and price trend analysis in chamarajanagar district of Karnataka is aimed to study the correlation of arrivals and prices. Facilitated market wise arrivals, price trend comparison and seasonality study. Secondary data of month wise, market wise Turmeric arrivals (Quintals) and price trends (Rs/Quinatl) are collected from 2004 to 2018 from all the three markets of the district such as Chamarajanagar, Gundlupet and kollegal. District total and weighted average model prices are worked out, analyzed and interpreted in the report. The results revealed that the gradual increase in the arrivals from 2004 to 2009 and noticed fluctuation in the year wise arrivals due to prices, which will influence the sowing and arrivals of consecutive year in addition to rainfall and other productivity influencing factors. Prices are highly fluctuating due to supply, demand and other market dynamics. Highest arrivals were noticed in 2012 i.e. 171915 quintals and noticed comparatively lower model price in 2012 (Compared from 2010 to 2018) due to increased supply and steady demand. Prices are higher in 2010 and influenced the sowing area in the consecutive years. Year wise model prices are positively correlated by 56%, 34% and 84% respectively with year, arrivals and maximum price and negatively correlated by 0.6% with minimum prices may be due to lower quality arrivals which fetches lower prices. Seasonal arrivals will start from February and noticed up to June and gradual reduction in the arrivals are noticed from July on wards. Model prices are traded low in June month due to increased arrivals and marginal arrival increase is noticed in November since farmers tend to sell the old stock with the new crop arrival expectation from January of consecutive year and Monthly arrivals and prices are negatively correlated by 13 % and witnessing the supply and demand dynamics and prices are reducing due to increased arrivals. Farmers are recommended to diversify the cropping pattern for consistent and high net returns and to avoid the distress sales at the peak arrival time and immediate cash requirement can be met by taking loan by banks against stock deposits at central and state warehouse corporations.

Introduction

Turmeric is the major spice crop grown in Chamarajnagar and the district is the major production contributor to state, Majority of the farmers in Karnataka are small and marginal and only about 2% of the farmers are large farmers and Market arrivals and prices are the driving factors to take sale and next season sowing decision by farmers (Reference No 8)

Turmeric marketing plays a vital role in the movement of commodity from the producer to the consumer and in stabilizing prices. The planned increase in agricultural output must be coordinated with changes in the demand and supply of agricultural commodities and marketing. This can be fruitful only when producer's share in consumer's rupee increases considerably irrespective of the volume of the marketable surplus produced with the farmers. Therefore, marketing rightly considered as much as essential input in addition to improved seed and fertilizer in modern agriculture. Arrivals will influence on the prices, which will directly decide the net remuneration and living standard of the farmer. Taking right decision is very crucial from farmer part to sustain the income levels.

APMC – Agricultural produce market committee plays an important in marketing Turmeric and provides a plot form for the farmers, brokers, traders and other stake holders of the supply chain and marketing is done through closed tender system to safe guard the producer interest

Following study helps in understanding the seasonality, price trend and conclusion will help the different stake holder of the Turmeric supply chain particular initiator of the chain i.e. farmer in taking decisions for his better hood.

Materials and methods

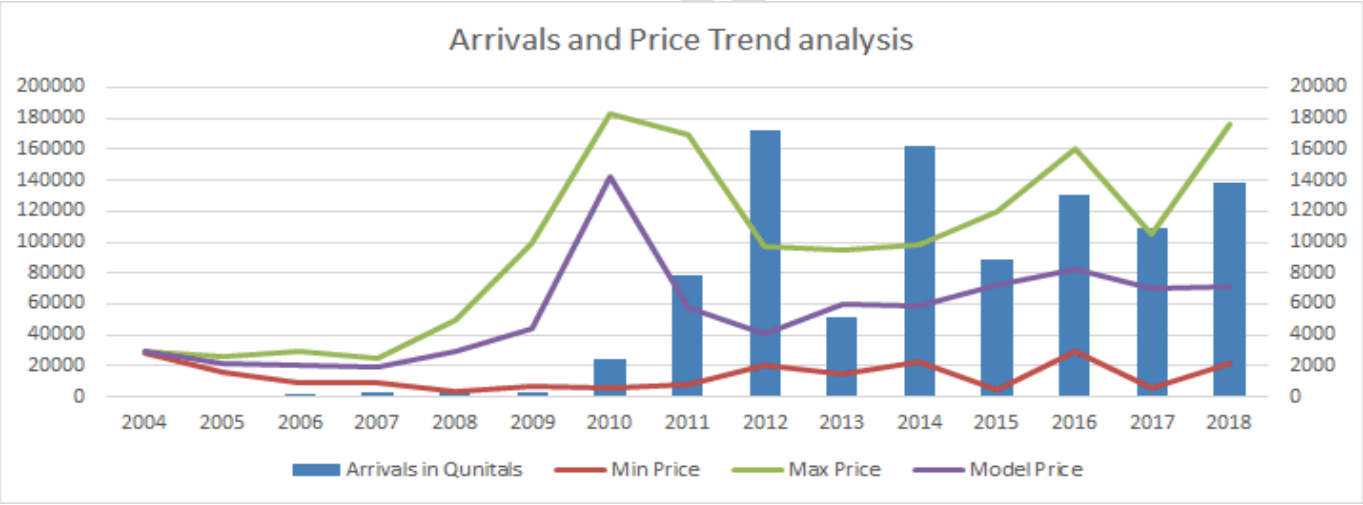
Turmeric month wise APMC arrivals, highest, lowest and model price data from all the three markets of the district such as Chamarajanagar, Gundlupet and Kollegal, is collected from 2004 to 2017 and data is analysed with stastical tools and techniques and interpreted in the report.

Results and Discussion

Following is the year wise arrivals, minimum, maximum and weighted average prices from 2004 to 2018,

Chamarajanagar District total				
Year	Arrivals in Quintals	Min Price	Max Price	Model Price
2004	80	2800	3000	2900
2005	291	1600	2600	2192
2006	2055	900	3000	2068
2007	3325	900	2500	1901
2008	2714	350	5000	2947
2009	2944	700	10000	4391
2010	24858	583	18351	14227
2011	78981	850	17000	5776
2012	171915	2000	9700	4082
2013	51940	1450	9500	5974
2014	162301	2250	9800	5895
2015	88652	500	12000	7234
2016	130697	3000	16000	8281
2017	108646	600	10500	7042
2018	137929	2100	17600	7067

Source: Krushi marata vahini website/APMC data



Arrivals were considerably low up to 2009 and picked up from 2010 and highest arrivals were noticed in 2012 i.e. 171915 quintals and noticed comparatively lower model price in 2012 (compared from 2010 to 2018) due to increased supply and steady demand (Reference No. 6) Prices are higher in 2010 and influenced the sowing area and arrivals in the consecutive years.

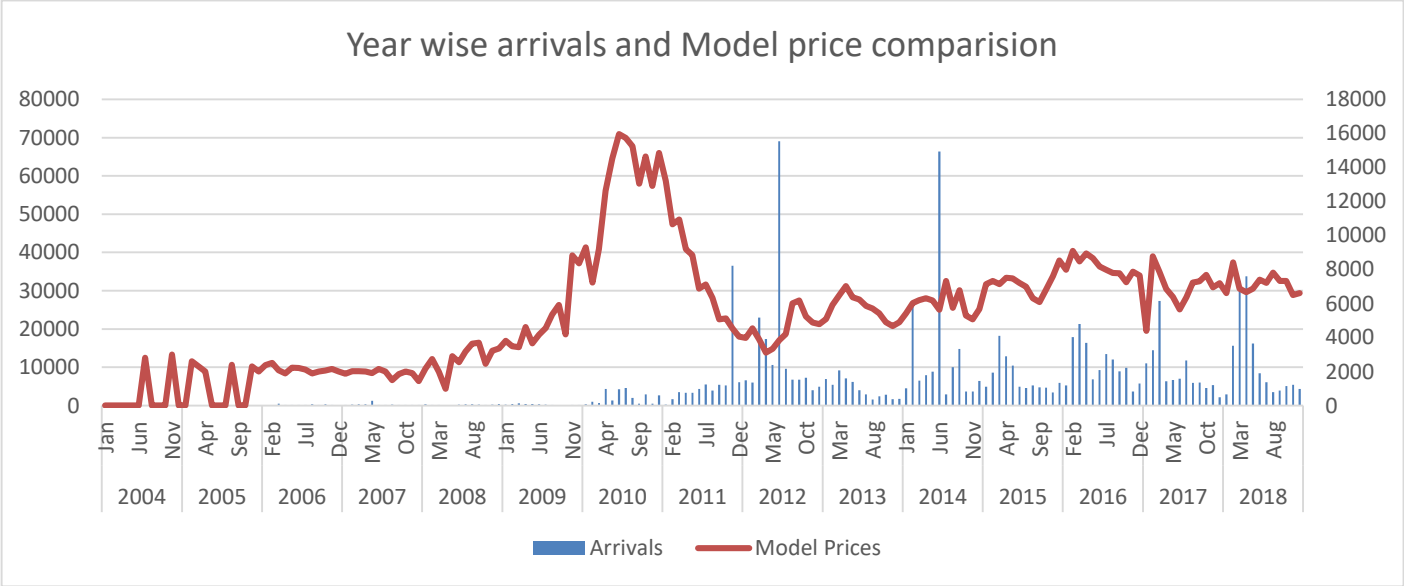
Arrivals are depended on the production which is in turn related to sowing area, rainfall, productivity of the crop and with the above trend, we can conclude that planters are considering the price factor in deciding the sowing area and which will influence the successive season production. Arrivals in 2018 are higher by 27%, 6% and 56% as compared to 2017, 2016 and 2015 respectively and lower by 15% as compared to 2014.
Model prices of 2018, are traded unchanged as compared to 2017 and lower by 15% and 2% against 2016 and 2015 due to increased arrivals and higher by 20% as compared to 2014 due to comparatively lower arrivals against 2014.

Following is the correlation between Year, arrivals, Minimum, Maximum and Model prices

Correlation Table	*Year*	*Arrivals in Quintals*	*Min Price*	*Max Price*	*Model Price*
Year	1.00				
Arrivals in Quintals	0.82	1.00			
Min Price	0.12	0.43	1.00		
Max Price	0.72	0.56	0.04	1.00	
Model Price	0.56	0.34	-0.06	0.84	1.00

Arrivals, Minimum, Maximum and Model prices are positively correlated by 82%, 12%, 72% and 56% with years. Model prices are positively correlated by 56%, 34% and 84% with year, arrivals and maximum price respectively and negatively correlated by 0.6% which may be due to lower quality arrivals, which fetches lower prices.

Following is the year wise month wise arrivals and model price comparison:



Source: Krushi marata vahini website/APMC data

2004 to 2010- Arrivals were low up to 2009 and historical high prices are noticed in year 2010 (15000 to 18000/- per quintal) and it has influenced on the sowing area and area was increased more than two times as compared to normal sowing area. Prices started sliding down after June in the year 2011

2011- There was a complete down trend in the prices and with better arrival prospects. Prices decreased gradually from January to December in 2011.

2012-Average model price in 2012 was 4082/- per quintal which was the lowest recorded price from 2009 to 2018 witnessed by the highest arrivals of about 171918 Quintals since prices reached historical high in 2010. There was a gradual improvement in the price post season after July since cropped area was reduced drastically due to price crash.

2013- Prices are stabilized across the months with marginal fluctuation with the year average of 5974/- per quintal and with the year arrivals of 51940 quintals.

2014- Average price for the year was 5895/- per quintal prices traded range bound across the months and arrivals for the year was 162301 quintals

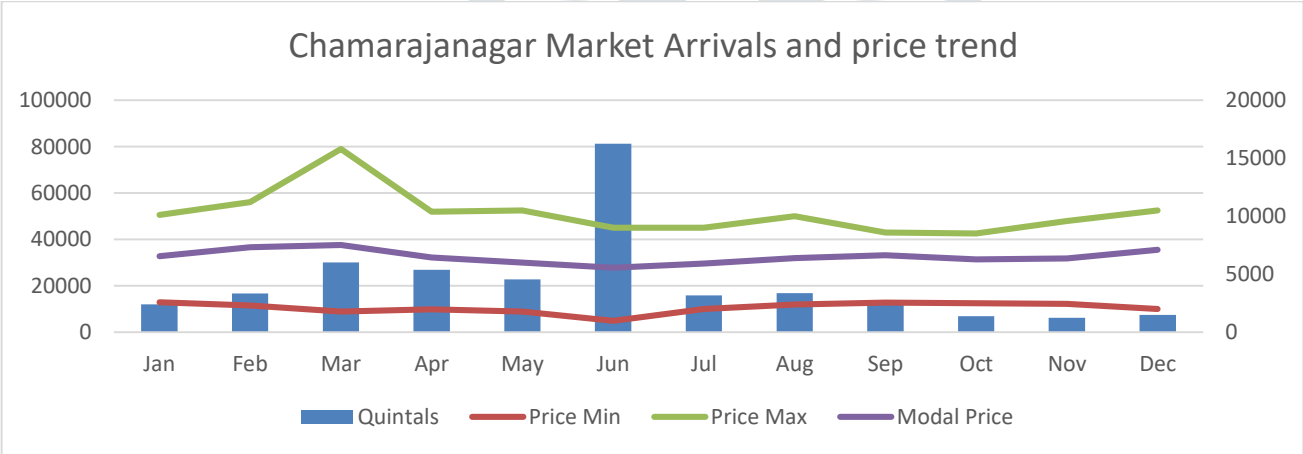
2015- Prices were moved marginally high from January month and arrivals were lower by 45% which was 88652 quintals as compared to 2014. Noticed prices were in steady trend up to November and increased in December.

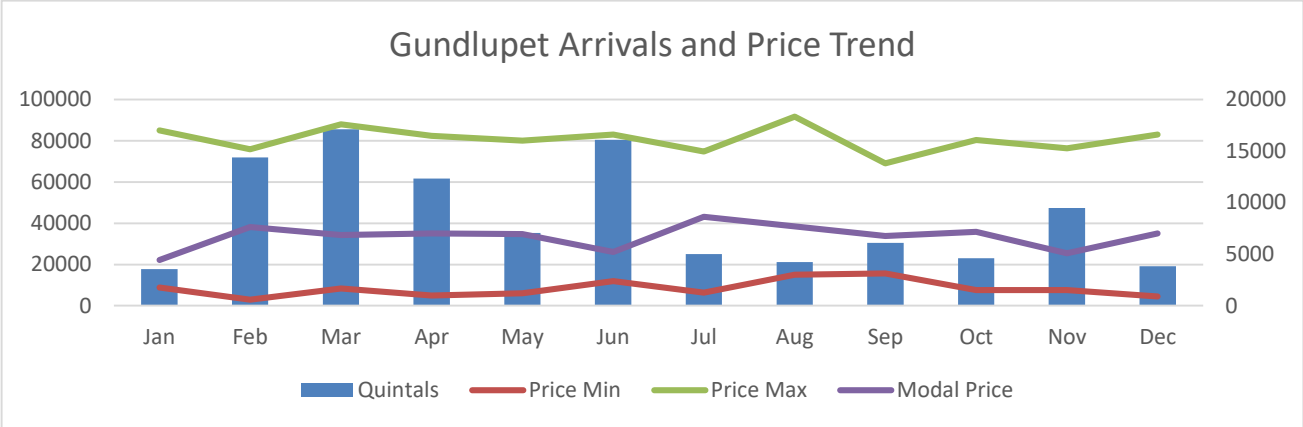
2016- There was an improvement in the arrivals in 2016 and noticed 130697 quintal arrivals prices were traded around 8000/- per quintal up to June and noticed marginal reduction from July and prices were traded steady up to December

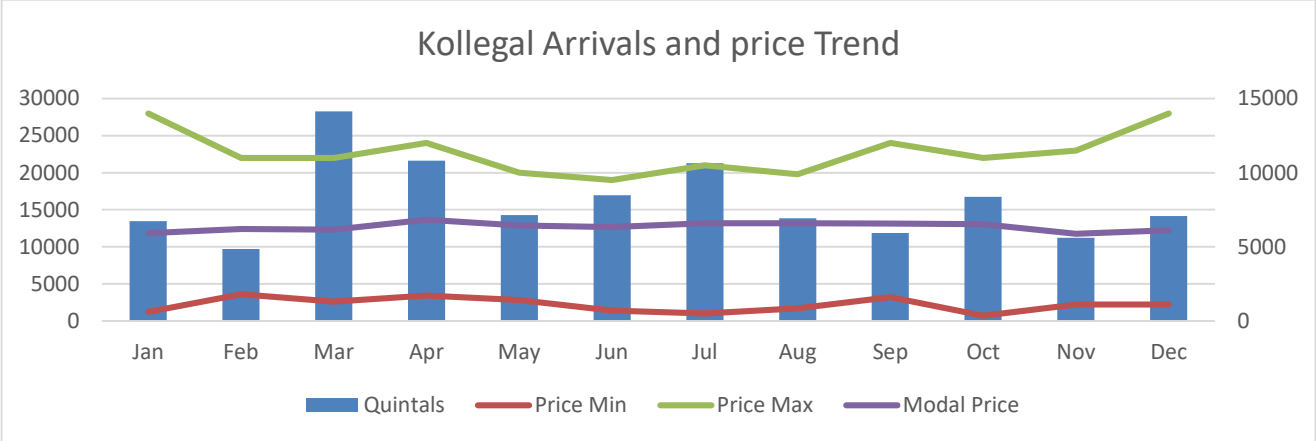
2017- Arrivals for the year was 108646 quintals with the year average price of 7042/- per quintal. Prices traded steady from February to December with marginal fluctuations.

2018- There was an increase in the arrivals in 2018 as compared to 2017 and noticed 137929 quintals with the average price of 7067/- per quintal. Seasonal prices were lower from March to May and noticed marginal improvement from April to October and reduced in November December months due to better crop and arrival prospects of consecutive year.

Following is the month wise arrivals of all the three markets of Chamarajanagar district: Chamarajanagar, Gundlupet and kollegal,







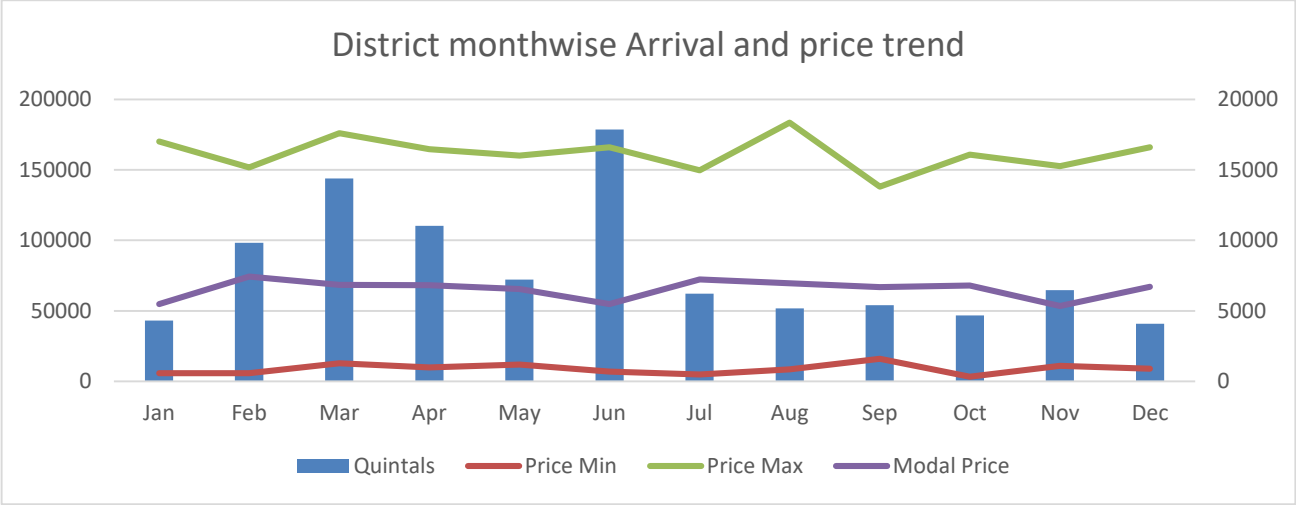
Source: Krushi marata vahini website/APMC data

Chamarajnagar Market arrivals were highest in June month and seasonal arrivals were noticed from February and gradual reduction in arrivals from June, lowest prices were observed in June month due to arrival pressure. Highest prices were recorded in February to March may be due to increased seasonal demand from extraction customers.

Gundlupet arrivals will start from February and good arrivals were noticed up to June, highest arrivals were noticed in March month, lowest model prices were noticed in June due to arrival pressure and highest model prices were observed in July due to reduced arrivals.

Kollegal seasonal arrivals were observed from February, highest arrivals were noticed in March month and model prices were comparatively lower in March month due to arrival pressure, prices traded almost steady with marginal variation at kollegal market witnessed with steady arrivals.

Following is the month wise arrivals of Chamarajanagar District Total:



Source: Krushi marata vahini website/APMC data

Note: Arrivals are summated and model prices are worked based on weighted average considering the arrivals.

Monthly arrivals and prices are negatively correlated by 13 % and witnessing the supply and demand dynamics and prices are reducing due to increased arrivals. Seasonal arrivals will start from February and noticed up to June and gradual reduction in the arrival is noticed from July on wards. Model prices are traded low in June month due to increased arrivals and marginal arrival increase is noticed in November since farmers tend to sell the old stock with the new crop arrival expectation within two months (From January of next consecutive year).

Conclusion

Arrivals were low up to 2009 and increased gradually year on year from 2009 due to increased interest by the farmers in turmeric cultivation. Highest arrivals were noticed in 2012 due to historical price influence in 2010 and 2011. Year wise model prices are positively correlated by 56%, 34% and 84% with year, arrivals and maximum price respectively and negatively correlated by 0.6% with minimum price which may be due to lower quality arrivals, which fetches lower prices. Monthly arrivals and prices are negatively correlated by 13 % and witnessing the supply and demand dynamics and prices are reducing due to increased arrivals. Seasonal prices are influencing the sowing area in turn arrivals of the consecutive season. Highest arrivals are observed in June in Chamarajanagar and in March in Gundlupet and Kollegal markets and influenced the prices to trade low due to arrival pressure in high arrival months. Farmers are recommended to diversify the cropping pattern for consistent and high net returns and to avoid the distress sales at the peak arrival time and immediate cash requirement can be met by taking loan against stock deposits at central and state warehouse corporations.
Proper sale decision by the farmers, adopting improved marketing strategies will help to improve the producer share in consumer rupee, sustainable farm income and standard of living considerably.

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