# A Study on Factors Affecting the Pricing Strategy of Flowers in Agricultural Produce Market Committee (APMC) Kalyan 

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#### Abstract

In India, along with the economic slowdown, inflation is ruling significantly above the threshold level, The cultivation area of various flowers in India is 103,000 hectares. Postharvest management and value addition to cut flowers can increase prices by $5-10 \%$. The disposal of organic waste in a Centralized wholesale market at dumpsites since, Perishable commodities have a one-day shelf life. For example, if the demand for a flower rises, its supply cannot rise on the same day. Because supply is fixed, it has no effect on price. As a result of the fixed supply of flowers, their prices are determined by demand on that day and fall as demand decreases. The efficiency of the supply chain can be improved through proper infrastructure and the elimination of middlemen. The entities involved in the agricultural logistics of flowers must work together to reduce logistics costs. Export to other countries, demonstrating that there is enormous scope for flower distribution not only in India, but also in the world, establishing India as one of the leading countries in agricultural logistics. The study will assist policymakers in developing an effective model of the APMC Act in India, as well as provide various measures to reduce flower cost inflation in India, which in return would help the consumers and vendors at the same time.


Keywords- Perishable commodities, Logistics, Wholesale Market, Shelf life, APMC Act

## Introduction

India is not known for their flower production in the world, but it still does produce over 3 million metric tons annually in floriculture. Currently, Tamil Nadu is the biggest producer of flowers in India. India mainly exports flowers to these countries US, Western Europe, Singapore, Japan and South Korea. Roses are the most popular flower, which is
exported from India. In India Agricultural Produce Market Committee (APMC) is the committee that manages the market of any region to ensure the regulations and other protocols are maintained. It is basically formed to observe the Agricultural and livestock market of that particular region be it physical, electronic or any other mode of selling or buying. So, when any product is decided to be sold in the market the price of the product is mostly decided by the existing price, and the extra price is added according to the market demand for that product. Therefore, if a product is in more demand but supply is less than the price of that product will decrease and vice versa.

The APMC Kalyan was established under Kalyan Agricultural Produce Market Committee, as per Section 4 (1) of Bombay Agricultural Produce Marketing (Regulation) Act 1939, On 01/05/1957, the Paddy and Rice have been declared as market areas. Currently, APMC's area of work is in Kalyan Revenue Taluka, which includes two cities like Kalyan and Dombivli and 121 villages.

## Objectives

1. To study how a price of a flower is decided in the market
2. To study the price fluctuations in the market according to season and festivals
3. To study the impact of logistics costs on the flower cost

## Literature Review

Narayan Rishi (2009) The study focused on India, which has a complex agroclimatic zone with temperatures, humidity, and rainfall ranging from ordinary to high. It produces the majority of the world's fruits and vegetables, grains, pulses, oil seed crops, fibre crops, sugarcane, spices, ornamentals, and numerous flowers. According to the research, virus illnesses and their vectors are abundant, and current tendencies for extensive and intensive agriculture, open international agricultural trade, food security, and a sustainable economy have created new problems in the battle against virus diseases and their vectors. Efficient diagnostic technologies have been created and widely used, and international phytosanitary standards have been established. A National Agricultural Biosecurity System will be established soon to defend agricultural systems and compete in worldwide agriculture.

Dr. K. Mariappan (Nov 2013)- The research paper followed Agriculture becoming an important economic activity. The global demand for flowers and floral products is also increasing due to the increase in GDP in many countries. Although India's participation in global trade is negligible, it has unlimited opportunities created by the global trade deficit and the liberal policies of the country. Producers and countries should be winners in this economic pursuit, as should consumers and The biggest challenge that farmers faced was timely providing the goods, and lack of adequate facilities regarding distribution of goods (storage and transportation packaging etc.).
P. Brat, C. Bugaud, C. Guillermet, F. Salmon (2020) research study focused on Banana green life (GL) which studied as the duration between harvesting and the commencement of natural ripening. It is a significant quality parameter that is distinguished by autocatalytic ethylene production. The main pre-harvest factors impacting GL are temperature during fruit growth and Black Sigatoka disease. The key exogenous storage characteristics (storage temperature, relative humidity, ethylene concentration, and $\mathrm{O} 2 / \mathrm{CO} 2$ ratio in the atmosphere)

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can be modelled. To keep green fruit until voluntary/artificial ripening occurs, a worldwide and integrated approach is required.

Wei Wang, Chongmei Zhang, Jiahao Song, Dingde Xu (2021) - In this research paper the authors with association with the Chinese government did research on cotton production pricing policies. It was done in Xinjiang, and the research helped them understand the places they had missed out and the negative results, which helped when making a new policy.

## Research Methodology

Quantitative and Qualitative data are used in this research study. Primary data was collected by visiting to APMC Kalyan and interviewing the flower vendors with the help of a questionnaire. The secondary data of the study is collected through various research journals, books, research articles and government reports.

The sample size for the research study is 12 vendors and 13 farmers and 5 exporters. A random sampling technique was used to retrieve the data.

## Data Analysis \& Interpretation

## gender

30 responses


## Data Interpretation:

The above data represents gender of the respondents, so in the 30 vendors, $36.7 \%$ is female and $63.3 \%$ is male.


## Data Interpretation:

The above data represents Age of the respondents, in the 30 respondents $13.3 \%$ where around $18-25,16.7 \%$ where above $50,30 \%$ where around $26-35$ and the rest $40 \%$ is around 36 50.

OCCUPATION 30 responses


## Data Interpretation:

The above data represents Occupation of the respondents, in 30 respondents $16.7 \%$ were exporters, $40 \%$ were Businessmen and $43.3 \%$ were farmers.

DO YOU PUCHASE FLOWERS OR GROW THEM
30 responses


- purchase and sell
- GRow and sell
- вотн


## Data Interpretation:

The above data represents how the respondents acquire their flowers, in 30 respondents $10 \%$ were from people who Grow, Purchase and Sell flowers, $43.3 \%$ are of respondents who Grow and sell flowers and $46.7 \%$ are of respondents who purchase and sell their flowers.


## Data Interpretation

So, when it comes to the price of the flowers, it is in between the range of Rs. 60 to Rs. 150 minimum and maximum of Rs. 200 to Rs. 300 according to the type and season that flower is brought.

## Data Interpretation

A Survey was done with 30 vendors to discuss the main issues which led to increase in the cost of products being

1. Falling water levels and lack of irrigation facilities
2. Lack of marketing skills and market knowledge
3. Lack of professionalism and small land holding

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4. Poor infrastructure
5. Controlled prices
6. Many middlemen only increases cost but overall do not add much value

## DO PRICE OF FLOWERS CHANGE ACCORDING TO SEASONS

30 responses


## Data Interpretation

The above data represents the respondents if the price of flowers change according to seasons where 29 vendors responded with yes and 1 vendor with maybe.


## Data Interpretation

The above data represents the festival in which the flowers are most expensive for the customers, in 30 respondents $13.3 \%$ uses it for Pongal, $26.7 \%$ is around Diwali, 30\% for Ganesh Chaturthi and $30 \%$ is around the time of Normal Pooja.

WHICH SEASON IS WORST FOR BRINGING FLOWERS
29 responses


## Data Interpretation

The above data represents the respondents' answers to which season is the worst time to buy and sell the flowers and the vendors responded with

1) Rainy being 65.6 percent the flowers wither faster due to the moisture

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2) Summer being second with about 27.6 percent where the flowers die due to lots of heat and have less shelf life
3) Least being winter with 6.9 percent since winter since cold has a preservative property, so the flowers have better shell life.

Count of IN WHICH MONTH FLOWERS ARE MOST EXPENSIVE


## Data Interpretation

The above data represents the month in which the flowers were most expensive, accordingly September is the month in which the flowers are most expensive according to $33.3 \%$ of respondents, followed by July being the second highest with $13.3 \%$ of respondents and February being the 3rd highest with $10 \%$ respondents.

WHERE DO YOU BRING YOUR FLOWERS FROM
30 responses


## Data Interpretation

The above data represents the respondents acquired the flowers from which city -
7 vendors from Pune, 6 vendors from Nagpur, 5 vendors from Lonavala, 4 vendors from Nasik, 3 vendors from Mangalore and 2 vendors from Satara

## HOW DO YOU BRING YOUR FLOWERS TO THE MARKET

30 responses


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                                    TRUCK
                                    - PUBLIC TRANSPORT (BUS,TRAIN)
                                    - personal vehicle
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## Data Interpretation

The above data represents the mode of transport by which the respondents bring their flowers to market, in 30 respondents, $30 \%$ use a personal vehicle, $33.3 \%$ use public transport and $36.7 \%$ respondents uses a Truck to deliver their flowers to the market. Truck travel takes the flowers from one place to another but the logistics cost retrieved by trucks is the highest and time is average not fast not slow and since the service is being outsourced by the farmer. Public transport like trains and buses are the lowest possible cost but the damage to the flowers is high and 30 to $40 \%$ of the flowers are not usable due to the high travel time. The personal vehicle has basic cost faster time to reach the destination and the flowers stay fresh too but this type of logistics is not available to all the farmers

When it comes to the price of the flowers, one of the respondents said that, on a normal day they can sell 100 flowers bought for Rs. 150 but the same 100 flowers can be sold up to 700 on Ganesh Chaturthi and during weddings. For a normal month, the income for that person is around Rs. 75,000 and nearly Rs. 9 lakhs annually. But on the other hand, during the rainy season, the flowers get damaged due to high moisture which its shelf life decreases, also the crops get damaged in wind and water which is also a loss for the farmers, and the price of the flowers can be increased.

## Conclusion

The flower market is very dynamic, with price changes occasionally occurring due to a seasonal, festival, or other factors. There isn't any fixed price that can decide for any flower. Instead, it would depend on their shelf life and the time during which it is sold. It is also a market with mostly constant demand in society with occasional spikes according to the festivals.

Respondents' top concerns about selling flowers at farmers' markets (APMC) are middlemen's exploitative behaviors, product perishability, high storage costs, and transportation costs. Lack of cold storage space, advance sales agreement, insufficient postharvest care, intermediary monopoly, Low-level issues including erratic supply, rudimentary methods of selling and price fixing, packing and loading issues, production quality variance, and a lack of storage facilities these are also the prime hurdles faced by vendors. The most crucial information is that $90 \%$ of flower producers sell their produce in communities, primarily to itinerant dealers, at much lower rates than the appropriate agricultural commodity procurement price. To address this, efforts such as fostering collective organization, timely delivery of quality inputs, training on contemporary production methods, promotion of contract farming, and strengthening of cooperatives have been used.

## Recommendations

- The vendors have to look at the production cost of the flowers and the storage transportation and middle men cost and final profit add-ons these are the basic costs to be decided before setting up the price for the flowers
- Vendors should try to set up contract farming near the market so that the transportation, storage and other miscellaneous costs will be minimized
- The vendors should properly analyse and see how much sales they can forecast during the rainy season because due to shelf life of flowers is less so if proper forecasting is done there would be a less wastage
- Since the market is so changing when it is the peak season like during festivals, or during wedding sessions it is recommended to increase the prices of the products to get the maximum profit.
- For the transportation of the flowers, vendors can partner up with any logistics or transportation company and make deals with them for the profit of both parties.


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