



A STUDY ON ARRIVALS AND PRICES OF BANANA IN YSR DISTRICT OF ANDHRA PRADESH, INDIA

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Abstract

Banana is cultivated in an extent of 60,000 ha in the Andhra Pradesh state. It is the third most important crop after citrus and mango, occupying 8 per cent of the fruit growing area in Andhra Pradesh (NHB, 2017). The analysis of seasonal indices in arrival and price of banana would be helpful for understanding the status of banana marketing in Andhra Pradesh. At this juncture, present study was attempted to analyze the variation in arrivals and prices of banana for the YSR district of Andhra Pradesh during 2008-09 to 2017-18 period. YSR district of Andhra Pradesh was purposively selected for this study since it ranks first in area under banana in overall districts of Andhra Pradesh. The primary and secondary data on market arrivals and prices of banana of Y.S.R district was collected from Pulivendula Market intermediaries. The collected data was analyzed through seasonal index method. The study showed that there was a significant relationship between market arrivals and prices during the months of July, May, February and January. The negative correlation is observed in other months of the year, which is not significant. The study suggested that infra structural facilities related to post harvest practices like cold storage and warehousing and value addition might be established and encouraged to stabilize arrivals and prices of banana in the study area.

Keywords: Market Arrivals, Market Prices, Seasonal Index.

Introduction

Banana (*Musa paradisiaca* L.) is one of the major fruit crops, cultivated in all warm and humid tropical and sub tropical regions of Asia, America, Africa and Australia. Banana is a global fruit crop with a production output of 83,269.04 tons in 2016-17 (FAO, 2017). India is second largest producer of fruits in the world and banana ranks first in production and third in area among fruit crop. Banana is cultivated in an extent of 60,000 ha in the Andhra Pradesh state. It is the third most important crop after citrus and mango, occupying 8 per cent of the fruit growing area in Andhra Pradesh (NHB, 2017). The analysis of seasonal indices in arrival and price of banana in YSR district would be helpful for understanding the status of banana in marketing. Present study was attempted to analyze the variation in arrival and price of banana in Pulivendula market of YSR district during 2008-09 to 2017-18 period.

Materials and Methods

YSR district of Andhra Pradesh was purposively selected for this study since it ranks first in area under banana in overall districts of Andhra Pradesh. The secondary data on market arrivals and price banana for the period of 2008-2018 was collected from the Y.S.R district fruit market intermediaries, Pulivendula. Data collected is analyzed through seasonal index method. To examine the correlation between monthly arrival and monthly price of banana, correlation coefficient 'r' was estimated with the help of following formula.

$$r = \frac{\sum xy - \frac{(\sum x)(\sum y)}{N}}{\sqrt{\left[\sum x^2 - \frac{(\sum x)^2}{N} \right] \left[\sum y^2 - \frac{(\sum y)^2}{N} \right]}}$$

Where

X = Monthly mean arrival of banana in Rs/quintals

Y = Monthly mean price of banana in quintals

N = Number of observation (or) time in number of years.

Results and Discussion

The findings of the present study as well as the relevant discussion depicted under the following heads.

Seasonal Indices of Arrivals of Banana in Pulivendula market, YSR district

The secondary data of banana arrivals for the period 2008-2017 was collected. The seasonal arrival index was estimated and presented in Table 1.

Table 1 : Seasonal indices of arrivals of banana in Pulivendula market, YSR district

S. No.	Month	Seasonal Arrival Index
1	January	99.52
2	February	108.31
3	March	94.82
4	April	92.76
5	May	98.83
6	June	108.10
7	July	107.19
8	August	99.23
9	September	98.70
10	October	93.56
11	November	100.39
12	December	98.51

The table clearly indicates that June is the peak month of arrivals of banana with the index of (108.10) followed by July (107.19) and November (100.39). The least arrival of banana are in month of April. The monthly variations in the arrivals of banana are depicted in Fig. 1.

Seasonal Indices of Prices of banana in Pulivendula market, YSR district

The secondary data of banana price for the period 2008-17 was collected. There is a vast fluctuations in the price of banana. Hence, the seasonal price index was estimated and presented in Table 2.

Table 2 : Seasonal indices of price of banana in Pulivendula market, YSR district

S. No.	Month	Seasonal Arrival Index
1	January	100.48
2	February	93.50
3	March	148.90
4	April	82.59
5	May	86.07
6	June	102.62
7	July	115.49
8	August	99.23
9	September	86.83
10	October	88.44
11	November	99.94
12	December	95.86

It could be seen from the table 2, the seasonal price index was in the month of March (48.90) and July (115.49). The least price index is in April with (82.59). Monthly variations in the prices of banana is shown in the Fig. 2.

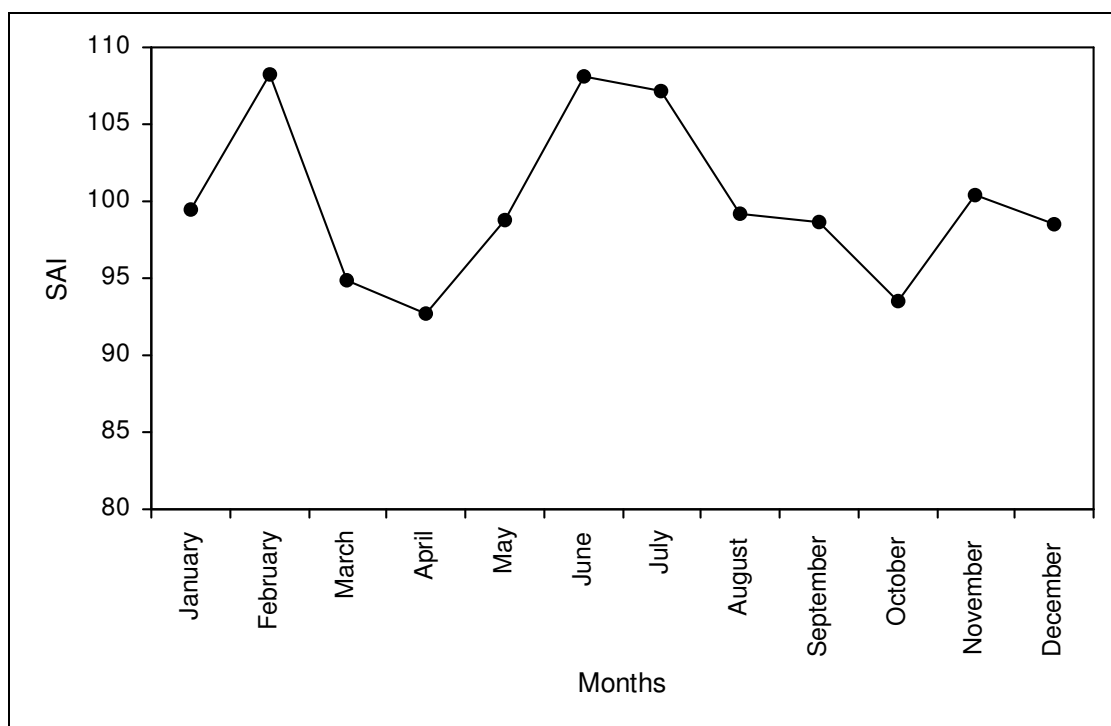


Fig. 1 : Seasonal indices of arrivals of banana in Pulivendula market, YSR district

Relationship between Arrivals and Price of Banana

The co-efficient of correlation between market monthly arrivals and average monthly whole sale prices of Banana in Pulivendula market during 2008-09 to 2017-18 was computed using correlation co-efficient (r) and presented in Table 3.

Table 3 : Correlation coefficient (r) between arrivals and Price of banana in Pulivendula market 2008-2017

S. No.	Month	Correlation coefficient (r)
1	January	0.373*
2	February	0.456*
3	March	-0.152
4	April	0.025
5	May	0.480*
6	June	-0.290
7	July	0.596**
8	August	0.178
9	September	0.192
10	October	-0.22
11	November	-0.368
12	December	0.006

It could be observed from the Table 3 that between market arrivals and prices there was a significant correlation for the months July, May, February and January. During the other months of year, there was a negative correlation observed between the market arrivals and prices was not significant. Similar findings were also observed by Dhiraj (2017) and Dhakre (2014) in the study of some other crop.

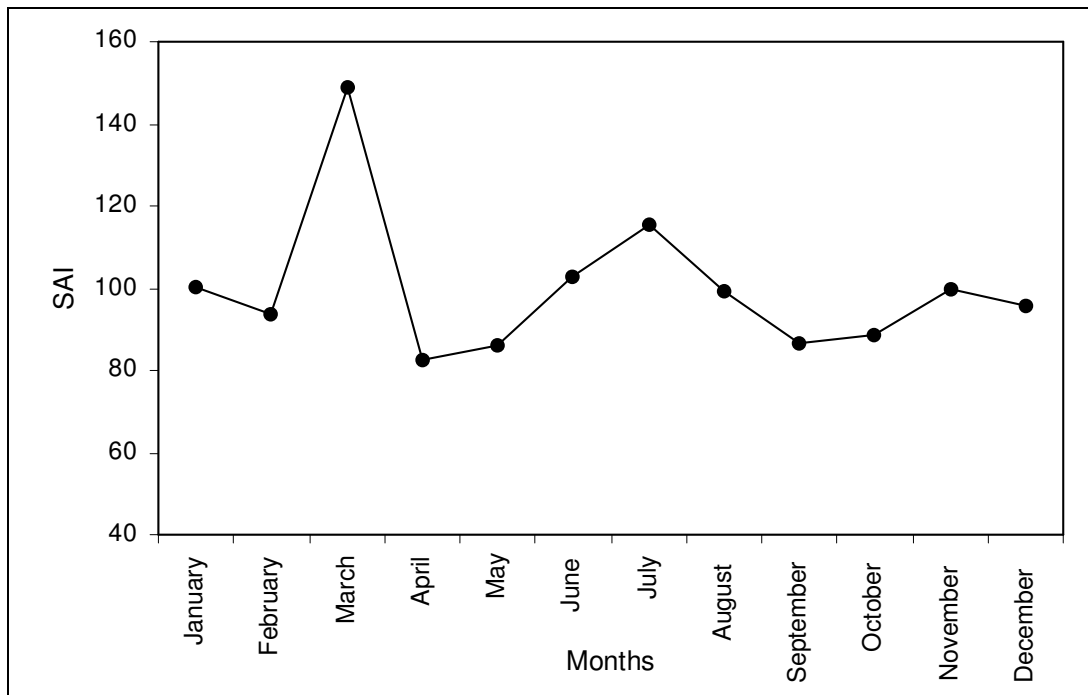


Fig. 2 : Seasonal indices of price of banana in Pulivendula market, YSR district

Conclusion

The study has concluded that the arrival and prices of banana in Pulivendula market of YSR district during 2008-2017 period. The seasonal indices of arrivals of banana is peak in June, July and November and the least in April month. The seasonal indices of prices of banana is high in March, July. The least price was observed in April. There was a significant relationship between market arrivals and prices during the months of July, May, February and January. The negative correlation is observed in other months of year, which is not significant.

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