



## RESEARCH PAPER

# Economic analysis of marketing of banana in Kadapa district of Andhra Pradesh

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**Abstract :** To accomplish the stated objectives 90 farmers were selected from three tehsils namely Vemula, Pulivendula and Lingala of Kadapa district. The study was based on primary data during the year 2021-2022. The data regarding marketing of Banana were collected from producers, 10 pre harvest contractors, 10 wholesalers and 10 retailers. The average gross returns were obtained was Rs.804955.81. The average per hectare net return received at overall was Rs. 377582.66. The overall input-output ratio was 1.88. The input output ratio which is an indicator of economic efficiency in crop production for the crop and it indicated that the banana registered a good input output ratio *i.e.* 1.88. Producer's share in consumer's rupee was highest in channel - I *i.e.* 76.23 per cent. Banana growers faced the problem of Incidence of disease with mean score of 71.74 in production of banana and fluctuation in price (mean score: 69.49) was the main constraint in marketing of banana.

**Key Words :** Economic analysis, Marketing, Banana

**View Point Article :** Vaishnavi, Pothu, Khobarkar, V. K. and Vaidkar, R. D. (2023). Economic analysis of marketing of banana in Kadapa district of Andhra Pradesh. *Internat. J. agric. Sci.*, **20** (1) : 263-267, DOI:10.15740/HAS/IJAS/20.1/263-267. Copyright@2024: Hind Agri-Horticultural Society.

**Article History :** Received : 05.10.2023; Revised : 07.11.2023; Accepted : 06.12.2023

## INTRODUCTION

Banana varieties originated from the two well-known species *Musa acuminata* and *Musa balbisiana*. The banana is currently the most popular tropical fruit on the global market, due to an extremely developed and prepared business. The second most important fruit crop in India, after mango, is the banana (*Musa* sp.). The banana is a favourite fruit of all age groups due to its year-round availability, affordability, variety, flavour, nutritional value, and medicinal price. High-tech crop farming is a financially viable business that leads to an increase in production, improvement in product quality,

and early crop adulthood with the products attracting top money prices. In terms of area under cultivation, output, and export of bananas in the nation, Andhra Pradesh takes the top spot. The state government has selected banana as one of the growth engine crops. The districts of Rayalaseema have become the top producing regions and also in the amount of farmers that are reportedly working in agriculture. The majority of banana growers in the state cultivate the Karpura Chakkerakeli, Tella Chakkerakeli, Budida Chakkerakeli, Amruthapani, Red-Banana, Sugandhalu (Karpura), Karpuravali (Budida Arti) and Rasthalu types of bananas. The United Arab Emirates, Bahrain, Egypt, and Saudi Arabia included

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under Primary destinations for export of banana. 2.315 million tonnes production in the state’s Kadapa district. In the district, the fruit is grown on 25,000 acres, 10,000 of which are in the Pulivendula constituency. Rajampeta and Railway Kodur are two further significant areas. Andhra Pradesh ranks first in production of Banana with 6209.44 thousand tonnes and the total area under banana was 100.16 thousand ha. Andhra Pradesh was contributing close to 18 per cent of the total production in the country. Banana is cultivated in over 25,000 acres of land in Kadapa district with Pulivendula town accounting for 10,000 acres.

**Objectives :**

- To study marketing channel and price spread of Banana
- To analyze constraints in marketing of Banana.

**MATERIAL AND METHODS**

The present investigation was undertaken to study the marketing aspects of Banana. Economic analysis was made by using different cost concepts and estimating marketing cost, price spread. The methodology used and analytical procedure have been explained in the present chapter.

**Sampling technique :**

The present study was undertaken in Rayalaseema region of Kadapa district of Andhra Pradesh. The region was selected purposively for the study as it has highest concentration of banana in the district. The sampling technique adopted for this study was multistage random sampling. Selection of district, selection of tahsil, selection of villages and selection of farmers were considered. A

sample of 90 farmers were selected randomly from the chosen area. From each village 10 farmers were selected randomly.

**Collection of data :**

The present investigation was based on the primary data. The selected farmers were personally interviewed and required data collected from them for the year 2021-2022, by the survey method through a specially designed pre-tested schedule. It includes information related to following aspects was collected. The banana farmers were further classified in to three size groups on the basis of land holding as small (up to 2 ha), medium (2.01-4 ha) and large (4.01 ha and above). The data on purchase price, expenses and margins obtained in the marketing of banana were collected from 10 Pre harvest contractors, 10 wholesalers, 10 retailers. This data were used for estimating market cost as well as price spread in marketing.

**Analytical procedure :**

Simple tabular analysis was carried out to work out the level of input utilized, cost of cultivation and returns from banana crop. The expenditure incurred by the selected farmers on growing crop was worked out by using the standard cost concept.

**Producer’s share in consumer’s rupee (Ps) :**

It is the price received by the farmers expressed as a percentage of the retail price (*i.e.* the price paid by the consumer). If it is the retail price the producers share in the consumers rupee (Ps) be expressed as follow:

$$Ps = \frac{\text{Net price received by the producer (Pf)}}{\text{Price paid by consumer (Pc)}} \times 100$$

The constraints in the marketing of banana analysed

Sr. No.	Tehsil	Village	Members
1	Pulivendula	Yerraballi	10
		Mallikarjunapuram	10
		Nalgondapalli	10
		Venkateshpuram	10
2	Vemula	Vemula	10
		Bhumayyagari palli	10
		Lopati nuthala	10
3	Lingala	Chinnakudala	10
		Ramnuthana palli	10
	Total		90

by using Garrett's ranking technique. The ranks given by the each respondent converted into percent position by using the formula:

## RESULTS AND DISCUSSION

Marketing channels are the root through which produce move from producer to consumer. Following important channels of distribution have been observed while studying the marketing of Banana under study area.

Channel I: Producer → Retailer → Consumer.

Channel II: Producer → Wholesaler → Retailer → Consumer.

Channel III: Producer → Pre harvest contractor → Wholesaler → Retailer → Consumer

Table 1 revealed that channel III (producer-pre-harvest contractor-wholesaler-retailer-consumer), was the major channel of distribution and overall 56 *i.e.* 62.22 per cent farmers sold their produce by this channel, followed by channel II 23 *i.e.* 25.56 per cent and channel I 11 *i.e.* 12.22 per cent.

In channel I *i.e.* (producer - retailer - consumer) quantity sold was less *i.e.* 13.38 per cent. In channel III *i.e.* (producer - pre-harvest contractor - wholesaler - retailer - consumer) quantity sold was 77290.00 quintal *i.e.* 64.13 per cent. The producer's share in consumer rupee is maximum when less intermediaries are included. It was observed that channel III *i.e.* (producer - pre-harvest contractor - wholesaler - retailer - consumer) is the major channel of distribution.

It is revealed from the Table 2 that the per quintal marketing cost incurred by the banana farmers was found highest in channel III *i.e.* Rs. 46.58 followed by channel II and channel I with Rs. 42.00 and Rs. 37.00, respectively. The total marketing cost incurred by pre-harvest contractor in channel III was Rs. 182.60. Total marketing cost incurred by wholesaler in channel II and III was Rs. 177.60 and Rs. 188.90, respectively. Total marketing cost of channel I, channel II and channel III was Rs. 211.26, Rs. 419.10 and Rs. 629.58, respectively.

## Price spread in marketing of banana :

The details about the price spread, producers share in consumers rupee were estimated in Table 3.

It is revealed from Table 3 that net price received by banana farmers was highest in channel I *i.e.* 76.23 per cent followed by channel II and channel III which was 60.46 per cent and 47.87 per cent, respectively. Marketing cost incurred by pre-harvest contractor was 8.65 per cent in channel III while marketing cost incurred by wholesaler in channel II and channel III was 10.15 per cent and 8.95 per cent, respectively. Price spread was observed highest in channel III *i.e.* Rs. 1099.85/- followed by channel II and channel I which was Rs. 692.00 and Rs. 347.00, respectively. Producer's share in consumer rupee was observed highest in channel I *i.e.* 76.23 per cent followed by channel II and channel III with 60.46 per cent and 47.87 per cent, respectively. It was found that comparatively channel I found more profitable than channel II and channel III in banana marketing, as there were less market intermediaries in channel I.

## Constraints in marketing of banana :

It could be observed from the Table 4 that the fluctuation in price (mean score: 69.49) was the first constraint faced by banana farmers in marketing of banana followed by dependence on middlemen (mean score: 64.11). The third constraint faced by farmers in marketing was no regulated market (mean score: 51.12). The fourth constraint was uneven payment for sale after sale of the produce (mean score: 33.72). The fifth constraint faced by banana farmers was lack of availability of market information (mean score: 33.56). Because of lack of market information regarding prices the farmers may fail in making proper decisions to sell the produce.

## Conclusion :

– Producer - Pre harvest contractor- Wholesaler - Retailer - Consumer was the important channel through

**Table 1 : Quantity of banana sold through different channels**

Sr.No.	Channels	No. of banana growers	Quantity sold (qtl.)
1.	Channe II (Producer → Retailer → Consumer)	11 (12.22)	16120 (13.38)
2.	Channel II (Producer → Wholesaler → Retailer → Consumer)	23 (25.56)	27100 (22.49)
3.	Channel III (Producer → Pre harvest contractor → Wholesaler → Retailer → Consumer)	56 (62.22)	77290 (64.13)
	Total	90 (100.00)	120510 (100.00)

Table 2 : Per quintal marketing cost of banana				(Rs./qtl.)
Sr. No.	Particulars	Channel I	Channel II	Channel III
<b>A</b>	<b>Marketing cost incurred by producer</b>			
1.	Cost of boxes	0.00	0.00	0.00
2.	Transport charges	0.00	0.00	0.00
3.	Loading and unloading	35.00	40.00	44.58
4.	Weighing charges	2.00	2.00	2.00
5.	losses	0.00	0.00	0.00
6.	Market fee	0.00	0.00	0.00
7.	Other	0.00	0.00	0.00
8.	Marketing cost	37.00	42.00	46.58
	Selling price of producer	1150.00	1100.00	1056.73
<b>B</b>	<b>Marketing cost incurred by pre-harvest contractor</b>			
1.	Cost of boxes	?	?	45.00
2.	Transport charges	?	?	35.60
3.	Loading and unloading	?	?	50.00
4.	Weighing charges	?	?	2.00
5.	Market fee	?	?	50.00
6.	Other	?	?	0.00
7.	Marketing cost	?	?	182.60
	Selling price of pre-harvest contractor	?	?	1388.50
<b>C</b>	<b>Marketing cost incurred by wholesaler</b>			
1.	Cost of boxes	?	50.00	45.00
2.	Transport charges	?	30.00	37.40
3.	Loading and unloading	?	45.60	54.50
4.	Weighing charges	?	2.00	2.00
5.	Shop rent	?	0.00	0.00
6.	Storage charges	?	0.00	0.00
7.	Market fee	?	50.00	50.00
8.	Other	?	0.00	0.00
9.	Marketing cost	?	177.60	188.90
	Selling price of wholesaler	?	1400.00	1725.00
<b>D</b>	<b>Marketing cost incurred by retailer</b>			
1.	Cost of boxes	45.00	40.00	48.00
2.	Transport charges	20.00	23.00	25.00
3.	Loading and unloading	40.00	45.00	48.50
4.	Weighing Charges	2.00	2.00	2.00
5.	Shop rent	11.26	13.50	12.00
6.	Storage charges	6.00	6.00	6.00
7.	Market fee	50.00	70.00	70.00
8.	Other	0.00	0.00	0.00
9.	Marketing cost	174.26	199.50	211.50
	Selling price of retailer	1460.00	1750.00	2110.00
	Purchase price of consumer	1460.00	1750.00	2110.00
	<b>Total marketing cost</b>	<b>211.26</b>	<b>419.10</b>	<b>629.58</b>

Table 3 : Price spread in marketing of banana			(Rs./qtl.)	
Sr. No.	Particulars	Channels		
<b>A</b>	<b>Producer</b>	<b>Channel I</b>	<b>Channel II</b>	<b>Channel III</b>
1.	Gross Price received by Producer	1150.00 (78.77)	1100.00 (62.86)	1056.73 (50.08)
2.	Marketing cost incurred	37.00 (2.53)	42.00 (2.40)	46.58 (2.21)
3.	Net price received by producer	1113.00 (76.23)	1058.00 (60.46)	1010.15 (47.87)
<b>B</b>	<b>Pre harvest contractor</b>			
1.	Purchased price	–	–	1056.73 (50.08)
2.	Marketing cost incurred	–	–	182.60 (8.65)
3.	Net margin	–	–	149.17 (7.07)
4.	Selling price	–	–	1388.50 (65.81)
<b>C</b>	<b>Wholesaler</b>			
1.	Purchased price	–	1100.00 (62.86)	1388.50 (65.81)
2.	Marketing cost incurred	–	177.60 (10.15)	188.90 (8.95)
3.	Net margin	–	122.40 (6.99)	147.60 (7.00)
4.	Selling price	–	1400.00 (80.00)	1725.00 (81.75)
<b>D</b>	<b>Retailer</b>			
1.	Purchased price	1150.00 (78.77)	1400.00 (80.00)	1725.00 (81.75)
2.	Marketing cost incurred	174.26 (11.94)	199.50 (11.40)	211.50 (10.02)
3.	Net margin	135.74 (9.30)	150.50 (8.60)	173.50 (8.22)
4.	Selling price	1460.00 (100.00)	1750.00 (100.00)	2110.00 (100.00)
<b>E</b>	<b>Consumer</b>			
1.	Purchasing Price	1460.00	1750.00	2110.00
2.	Net price received by producer	1113.00	1058.00	1010.15
	Price spread	347.00	692.00	1099.85
	Producers share in consumer rupees	76.23	60.46	47.87

(Figures in parenthesis indicate percentage to consumer price)

Table 4 : Constraints in marketing of banana			
Constraints in marketing			
1.	Dependence on middlemen	64.11	2
2.	Uneven payment for sale after sale	33.72	4
3.	Lack of availability of market information	33.56	5
4.	Fluctuation in prices	69.49	1
5.	No regulated market	51.12	3

which maximum quantity was sold by the cultivators.

– In case of banana, Producers share in consumer's rupees was highest in Channel I (Producer - Retailer - Consumer) *i.e.* 76.23 per cent followed by channel II (Producer - Wholesaler- Retailer - Consumer) *i.e.* 60.46 per cent. And channel III (Producer - Pre harvest contractor- Wholesaler - Retailer - Consumer) *i.e.* 47.87 per cent. From this, it was concluded that channel-I was

most profitable than channel II and channel III.

– The major constraints faced by banana cultivators was Incidence of disease(mean score :71.74) and fluctuation in price (mean score: 69.49)

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