

RESEARCH PAPER

# Structure and conduct of regulated market – A case study of Hiriyyur APMC in Karnataka state

■ B.T. Anitha and M.R. Girish

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## ABSTRACT

The present study was conducted in Hiriyyur taluk of Chitradurga district of Karnataka state. The study was undertaken to analyse the structure and conduct of Hiriyyur APMC and constraints faced by producer-sellers and traders and commission agents in Hiriyyur APMC. The primary data for the study were obtained from 30 producer-sellers, 10 traders and five commission agents of Hiriyyur APMC. The secondary data / information were collected from the staff / records of the APMC. The systems of sale followed in Hiriyyur APMC were e-trading, open auction and mutual negotiation. The Hiriyyur APMC was oligopolistic in nature as the Gini concentration ratio was found to be 0.65. The major constraints faced by producer-sellers were high commission charges followed by arbitrary deductions and exploitation by middlemen while the major constraint faced by traders and commission agents was inadequate supply of commodities.

**KEY WORDS :** Agricultural marketing, APMC, Structure, Conduct, Constraints

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From the welfare point of view of farmers, consumers and middlemen, agricultural marketing plays a crucial role. The producer's share in the consumer rupee for a commodity is based on the development of marketing system in the economy.

Higher their share, greater would be the welfare to the producers. This depends upon the marketing system, market information and marketing facilities available in the country over time and space.

The agricultural markets generally remain inefficient due to existence of several market imperfections. These imperfections arise firstly out of monopolistic or oligopolistic activities of private traders and such imperfections are reflected in the extent of spatial and temporal price differentiations. At present, marketing is mostly under the clutches of dominant middlemen who serve as a link between producer and consumer as a result the producer's share in consumer's rupee has been drastically squeezed. As such the traders draw a large

## MEMBERS OF THE RESEARCH FORUM

### Correspondence to:

M.R. Girish, Department of Agricultural Marketing, Co-operation and Business Management, University of Agricultural Sciences, G.K.V.K., Bengaluru (Karnataka) India  
E-mail: mrgirish2000@yahoo.co.in

### Authors' affiliations:

B.T. Anitha, Department of Agricultural Marketing, Co-operation and Business Management, University of Agricultural Sciences, G.K.V.K., Bengaluru (Karnataka) India

share in consumer rupee in view of their monopolistic activities as well as indulging in several other malpractices in the market. Second type of market imperfections arises out of inadequate development of market infrastructure resulting in costly and uncertain transport facilities, lack of grading, storage, etc.

It was envisaged that the regulatory marketing structure would provide physical facilities and an institutional environment to farmers, traders, processors and other market functionaries for conduct of their trading activities and thereby offering best prices to the producer-seller. In this context, the role of APMCs is pivotal in promoting agricultural marketing (Ramesh *et al.*, 2004).

The present study analyzed the functioning of Hiriya APMC in terms of structure, conduct and constraints faced by producer-sellers and traders and commission agents in Hiriya APMC.

## METHODOLOGY

The study was conducted in Hiriya taluk of Chitradurga district of Karnataka state during 2016-17. Hiriya APMC was purposively selected for the study. For the study, 30 producer-sellers, 10 traders and five commission agents of Hiriya APMC, resulting in a total sample size of 45 respondents was randomly selected. The data for the study included both primary and secondary data. The primary data for the study were obtained from the sample producer-sellers, traders and commission agents through personal interview method with the help of a pre-tested structured schedule. The secondary data / information were collected from the staff / records of the APMC.

## ANALYSIS AND DISCUSSION

The findings of the present study as well as relevant discussion have been summarized under the following heads :

### Structure and conduct of Hiriya APMC:

Table 1 presents the structure and conduct of Hiriya APMC. Hiriya APMC established in 1959 was regulated in 1961 as per the provisions of Karnataka Agricultural Produce Marketing (Regulation and Development) Act 1966. The APMC is located on Babbar road, at about 1.5 kms from Hiriya town. The notified area of the APMC is entire Hiriya taluk with a radius of about 50 kms covering 154 villages. The size

of the market yard of APMC is 39 acres and 27 guntas of land.

The market committee is an elected one, consisting of 11 members. The working hours of the APMC are from 10 AM to 5.30 PM and the weekly market holiday is Tuesday. All the notified commodities are transacted in the APMC. The major commodities traded in the APMC are groundnut, sunflower and maize while the minor commodities traded were vegetables, fruits and flowers. The trading hours are 9 AM to 6 PM. The methods of sale were e-tendering in the case of groundnut and sunflower; open auction in the case of all other commodities and mutual negotiation in the case of sheep and goat. As per the provisions of the Karnataka Agricultural Produce Marketing (Regulation and Development) Act 1966, the method of sale has to be through open auction / closed tender. Hence, accordingly, open auction method was followed for the sale of all commodities except groundnut and sunflower. In order to promote transparency and to ensure a fair price in a competitive environment to producer-sellers, e-tendering – a novel method of sale, launched for the first time in the country, in Mysuru APMC, is being promoted in other APMCs across the State of Karnataka and the country. Accordingly, e-tendering as a method of sale is being followed for groundnut and sunflower in Hiriya APMC. However, the sale of sheep and goat in the APMC is through mutual negotiation.

Electronic weighing machines are used for weighing of commodities in the APMC. The buyer of the produce has to make immediate payment to the producer-sellers and the method of payment is through cash / cheque.

The market fee is 1.5 per cent of the value of the produce for all commodities while it is one per cent for fruits and vegetables. In the case of sheep and goat, it is Rs.1/- per head. The market fee collected for the year 2015-16 was Rs. 52,08,308/-.

As per the records of the APMC, the average daily arrivals were found to be highest (32 quintals) in the case of groundnut followed by sunflower (30 quintals), maize (20 quintals), paddy (10 quintals) and bengal gram (10 quintals). Among the market functionaries, traders were found to be highest (154) in number followed by stockists (134), importers (134), exporters (130), hamals (96) and processors (76).

Infrastructural facilities such as market yard, auction platforms, storage godowns, weighing machine, shops,

Table 1: Structure and conduct of Hiriyyur APMC		
Sr. No.	Particulars	Hiriyyur APMC
<b>General information</b>		
1.	Year of establishment	1959
2.	Location of market	Babbur road, Hiriyyur – 572 144
3.	Year of regulation	1961
4.	Name of the market legislation	Karnataka agricultural produce marketing (R and D) Act 1966
<b>Details of market area</b>		
5.	Notified area	Hiriyyur taluk
6.	Coverage of market	
7.	Radius in kms	50
8.	No. of villages	154
9.	Size of market yard	39 acres 27 guntas
10.	Distance (km) of market from nearest city – Hiriyyur	1.5 kms
<b>Administrative information</b>		
11.	Nominated / elected APMC	Elected
12.	No. of members in market committee	11
13.	Working hours	10 AM to 5.30 PM
14.	Market holiday	Tuesday
15.	Details of staff	Supervisory Administrative
	Permanent	1 5
<b>Conduct of APMC</b>		
16.	Commodities transacted	All notified commodities
17.	Major commodities	Groundnut, sunflower and maize
18.	Minor commodities	Vegetables, fruits and flowers
19.	Trading hours	9 AM to 6 PM
20.	Method of sale	Groundnut and sunflower: e-tendering Other commodities: Open auction Sheep and goat: Mutual negotiation
21.	System of weighment	Electronic weighing machine
22.	Method of payment	Cash / cheque
23.	Terms and conditions of sale	Buyers have to make immediate payment to the farmers Market fee of 1.5 % for all the commodities and 1 % for fruits and vegetables of the value of the produce; and Re.1 per head of sheep and goat, has to be paid by the buyer
24.	Market fee collected per annum (2015-16)	Rs. 52,08,308/-
25.	Average daily arrivals of major commodities	Commodity Average arrivals per day (quintals)
	Groundnut	32
	Sunflower	30
	Maize	20
	Paddy	10
	Bengal gram	10
	Coconut	500*

Table 1: Contd.....

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<b>Details of market functionaries</b>				
26.	Traders		154	
27.	Commission agents		32	
28.	Stockists		134	
29.	Processors		76	
30.	Exporters		130	
31.	Importers		134	
32.	Hamals		96	
33.	Warehousemen		1	
<b>Infrastructural facilities available</b>				
34.	Facilities	Yes / No	No. / size / capacity	Functional /non-functional
	Market yard	Yes	1	Functional
	Auction platforms	Yes	2	Functional
	Drying yards	No	-	-
	Grading / packing sheds	No	-	-
	Storage godowns	Yes	9	Functional
	Cold storage / warehouses	No	-	-
	Commodity processing unit	No	-	-
	Weighing machine	Yes	1	Functional
	Shops	Yes	17	Functional
	General notice board	Yes	1	Functional
	Notice board for price displays	Yes	1	Functional
	Public address system	Yes	1	Functional
	Audio visual aids	No	-	-
	Computers	Yes	3	Functional
	Internal roads	Yes	-	-
	Raitha bhavana	Yes	1	Functional
	Drinking water facilities	Yes	-	Functional
	Electrification	Yes	-	Functional
	Input / sundry shops	Yes	7	Functional
	Canteen	No	-	-
	Rest house for farmers	No	-	-
	Parking	No	-	-
	Garbage disposal system	No	-	-

general notice board and notice board for price displays, public address system, computers, internal roads, raitha bhavana, drinking water facilities, electrification and input / sundry shops were available in Hiriyur APMC while the facilities such as drying yards, grading / packing sheds, cold storage / warehouses, commodity processing unit, audio visual aids, canteen, rest house for farmers, parking and garbage disposal system were not available in the APMC.

Groundnut was the major agricultural commodity in terms of arrivals to Hiriyur APMC. Hence, groundnut was considered for analyzing the concentration of market power among traders. Table 2 presents the concentration of market power among groundnut traders of Hiriyur APMC.

The Lorenz co-efficient of inequality for traders of Hiriyur APMC was 0.95, indicating that the market power was concentrated in the hands of few traders. It was found that about 17 per cent of the traders handled around 49 per cent of the quantity transacted in the market yard followed by about 26 per cent of the traders handling around 32 per cent of the produce, about 31 per cent traders handling 15 per cent and the rest, *i.e.*, about 26 per cent traders handling about four per cent of the produce.

The Hiriyur APMC was oligopolistic in nature as the Gini concentration ratio was found to be 0.65. Mothkur (2000) in her study on marketing efficiency of groundnut in Challakere APMC found the Gini co-efficient ratio to be 0.91, indicating a high degree of concentration in the

market. Gichangi (2010) in his study on structure, conduct and performance of sweet potato marketing in Nairobi and Kisumu markets of Kenya found that the sweet potato market was highly concentrated with Gini co-efficients of 0.71 and 0.56 for Nairobi and Kisumu markets, respectively. Nzima *et al.* (2014) in their study on structure, conduct and performance of groundnut in five markets in Northern and Central Malawi reported that the degree of seller concentration was high (above 0.5) in all the markets, implying that these markets were dominated by a few sellers. Manjunath and Girish (2016) in their study found that MG-6 market (private vegetable market) was oligopolistic in nature while Mulbagal APMC market was monopolistic in nature.

### Constraints faced by producer-sellers in Hiriyyur APMC:

Table 3 presents the constraints faced by producer-sellers in Hiriyyur APMC. Based on Garrett's score, high commission charges was the major constraint faced by producer-sellers in Hiriyyur APMC. As per the APMC

regulations, the producer-seller is not supposed to pay any commission charges. However, in Hiriyyur APMC, it was observed that the producer-sellers were paying commission at the rate of two to three per cent of the value of the produce.

The second major constraint faced by producer-sellers in Hiriyyur APMC was arbitrary deductions. This is because, in addition to deduction of two kgs of produce during weighment, hamals were arbitrarily taking some amount of produce from the lots during bagging, after the auction.

The third major constraint faced by producer-sellers was exploitation by middlemen. The middlemen took advantage of the financial obligations made by the farmers towards credit and other facilities extended by these middlemen during the crop production period. Obviously, the farmers were forced to sell to them, inspite of the availability of other options. It was observed that the middlemen were pre-fixing a price among themselves, thus, making the market less competitive.

The other constraints faced by producer-sellers

**Table 2: Concentration of market power among groundnut traders of Hiriyyur APMC**

Sr. No.	Size groups (quintals)	No. of traders	Total quantity handled (quintals)	Percentage of traders	Cumulative percentage of traders	Percentage of quantity handled	Cumulative percentage of quantity handled
1.	Upto 25	6	70.65	26.08	26.08	3.84	3.84
2.	>25-75	7	285.30	30.43	56.52	15.51	19.35
3.	>75-125	6	583.00	26.08	82.61	31.70	51.05
4.	>125-175	2	265.35	8.70	91.30	14.43	65.48
5.	>175	2	634.95	8.70	100	34.52	100
	Total	23	1839.25	100		100	

Lorenz co-efficient of inequality = 0.95

**Table 3: Constraints faced by producer-sellers in Hiriyyur APMC**

Sr. No.	Factors	Mean garrett's score	Rank
1.	High commission charges	69.33	I
2.	Arbitrary deductions	67.25	II
3.	Exploitation by middlemen	64.59	III
4.	Lack of competition	58.55	IV
5.	Poor administration	52.22	V
6.	Low price	48.14	VI
7.	Lack of market information	47.14	VII
8.	Lack of infrastructural facilities and poor maintenance	46.48	VIII

**Table 4: Constraints faced by traders and commission agents in Hiriyyur APMC**

Sr. No.	Factors	Mean garrett's score	Rank
1.	Inadequate supply of commodities	79.60	I
2.	Lack of infrastructural facilities and poor maintenance	69.60	II
3.	Lack of storage facilities	66.60	III

were lack of competition, poor administration, low price, lack of market information and lack of infrastructural facilities and poor maintenance. Sain *et al.* (2013) in their study on marketing constraints faced by guava growers in few districts of Haryana reported that the farmers were facing problems like lack of competition among buyers, inefficient market information and market intelligence.

### Constraints faced by traders and commission agents in Hiriya APMC :

Table 4 presents the constraints faced by traders and commission agents in Hiriya APMC. The major constraint faced by traders and commission agents was inadequate supply of commodities to APMC. This may be attributed to the fact that a major portion of the agricultural area of Hiriya taluk is rainfed and the situation has been further aggravated by frequent failure of monsoon in recent years. Moreover, part of the produce of major agricultural commodities is diverted to Challakere and Chitradurga APMCs. This is due to the fact that farmers anticipate better prices in these APMCs, due to relatively more competitive market environment.

The other major constraints faced by traders and commission agents were lack of infrastructural facilities and poor maintenance and lack of storage facilities. Though, the storage godowns are available in the APMC, they were not fully utilized due to poor maintenance (Safare *et al.*, 2015).

### Conclusion:

The main purpose of regulated markets is to provide a fair and competitive environment for buying and selling of agricultural produce by the elimination of unhealthy practices. Although, rules and regulations have been framed for the conduct of business to prevent exploitation of producer-sellers by middlemen and to make marketing system more efficient, it was observed that some of the regulations were not being followed.

The methods of sale followed in Hiriya APMC were e-tendering in the case of groundnut and sunflower; open auction in the case of all other commodities; and mutual negotiation in the case of sheep and goat. The Lorenz co-efficient of inequality for groundnut traders of Hiriya APMC was 0.95, indicating that the market power was concentrated in the hands of few traders. The Hiriya

APMC was oligopolistic in nature with a Gini concentration ratio of 0.65. In Hiriya APMC, it was observed that the producer-sellers were mainly facing problems of high commission charges, arbitrary deductions from the produce brought for sale in the APMC yard and exploitation by middlemen in the form of pre-fixed price among traders. Hence, the market committee may take necessary steps to check such malpractices. The traders / commission agents were facing constraints like inadequate supply of commodities due to decrease in flow of quantity of commodities from the market area of APMC. They also faced the problems of lack of storage facilities and lack of infrastructural facilities in the market yard. Therefore, the APMC may make efforts to ensure adequate arrivals of agricultural produce and also create the necessary infrastructural facilities in the yard; and thereby create a more competitive market environment.

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