IJCBM International Journal of Commerce and Business Management
Volume **6** | Issue 1 | April, 2013 | 111-113
RESEARCH PAPER

Structure and competitiveness of the maize market in Davanagere

G. RANGANATH, P.K. MANDANNA AND S. KUMAR

Received : *15.02.2013;* **Revised :** *08.03.2013;* **Accepted :** *03.04.2013*

ABSTRACT

An attempt was made to analyze the structure and competitiveness of the maize market in Davanagere. The Lorenz co-efficient of inequality was found to be 0.206 which revealed that there existed a higher degree of competitiveness for maize in Davanagere as market concentration was less. The maize traders from Davanagere established linkage with the poultry feed manufacturers of the district. Among the three poultry feed units in the study area, Feeds India Private Limited stood first for price and procurement reasons and Pragathi Feeds was preferred for payment reasons.

KEY WORDS : Structure, Competitiveness, Maize

How to cite this paper : Ranganath, G., Mandanna, P.K. and Kumar, S. (2013). Structure and competitiveness of the maize market in Davanagere. *Internat. J. Com. & Bus. Manage*, **6**(1) : 111-113.

India is the sixth largest producer of maize in the world contributing to 2.3 per cent of the global production. The crop is grown in an area of 7.18 million hectares with an annual production of around 18.7 million tonnes (as on 2009-10). Among the major producing states Andhra Pradesh tops the list with the contribution of 19 per cent to the total Indian maize production. Other producers are Karnataka (17 %), Bihar (10 %) and Madhya Pradesh (5 %). Karnataka produces around 17 per cent of the total maize production in the country. The average area under maize cultivation in the state during 2009-10 was 1.2 million hectares with a production of 3.17 million tonnes.

Davanagere is the major Maize producing district in Karnataka, accounting for 30 per cent of the state's production (0.95 million tonnes). The other major maize producing districts are Haveri, Belgaum, Bellary, Bagalkot, Chitradurga and Dharwad districts. Apart from Nizamabad in Andhra Pradesh, Davanagere in Karnataka is a major market in the country. Davanagere is also a delivery centre approved by NCDEX. Being the major maize producing district, Davanagere market attracts more quantity of maize arrivals than any other market in the state. This has lead to considerable improvement in the structure, conduct and performance of the maize market in Davanagere.

In this paper an attempt was made to analyze the structure and competitiveness of the maize market in Davanagere and to analyze the forward linkage of maize from Davanagere

METHODOLOGY

Davanagere district was selected as the study area as it is the major maize producing district in Karnataka. The Davanagere maIze :market area consists of the entire area of the Davanagere taluka. Hence, this taluka was purposively selected for the study. Further 30 traders from Davanagere market were selected for extracting the primary data. Lorenz curve technique was used for analyzing market structure at traders level to measure their concentration of market power and competitiveness of the market in the study area. Tabular analysis was conducted to analyze the forward linkage

MEMBERS OF THE RESEARCH FORUM

Correspondence to:
P.K. MANDANNA, Department of Agriculture Marketing and Business Management, University of Agricultural Sciences, G.K.V.K., BENGALURU (KARNATAKA) INDIA
Email: pk.mandanna@yahoo.com

Authors' affiliations:
G. RANGANATH AND S. KUMAR, Department of Agriculture Marketing, Co-operation and Business Management, University of Agricultural Sciences, G.K.V.K., BENGALURU (KARNATAKA) INDIA

followed by traders by identifying and tabulating to find the most preferred feed unit where they sold their stock. Lorenz co-efficient of inequality was estimated using the following formula :

$$L = i - \sum_{i=1}^{n} \frac{(Xi - Xi - 1)(Yi + Yi - 1)}{10000}$$

where,

L– Lorenz coefficient of inequality

Xi–Cumulative percentage of number of firms up to and including i^{th} class

Yi –Cumulative percentage of quantity handled by firms up to and including i^{th} class

n– Number of firms or size groups

i– Takes value 1, 2, 3, ———— n size groups

L– Takes the values between 0 and 1 with L :::; 0 indicating perfect equality in the distribution and L:::; 1, indicating perfect inequality in the distribution

Xi-I–Cumulative percentage of number of firms upto and including (i-1)th class

Yi-l–Cumulative percentage of quantity handled by firms up to and including $(i -1)^{th}$ class.

ANALYSIS AND DISCUSSION

The findings obtained from the present study are presented below:

Market structure and competitiveness of the maize market in Davanagere:

It could be observed from the Table 1, that in Davanagere maize market, 66.67 per cent (20 traders) of traders were in the size group of >9000 quintals with a share of 87.22 per cent (545500 quintals) of the total quantity handled. 30 percent (9 traders) of the traders were in the size group of 6001-9000 quintals with a share of 11.83 per cent (74000 q) of the total quantity handled and 3.33 per cent (1 trader) of the traders were in the size group of 3001-6000 quintals with a share of 0.95 per cent (6000 q) of the total quantity handled.

There were no traders present in the size group of 0-3000 quintals. The Lorenz curve is depicted in the Fig. 1 and the Lorenz co-efficient of inequality was found to be 0.206 which revealed that there existed a higher degree of competitiveness for maize in Davanagere as market

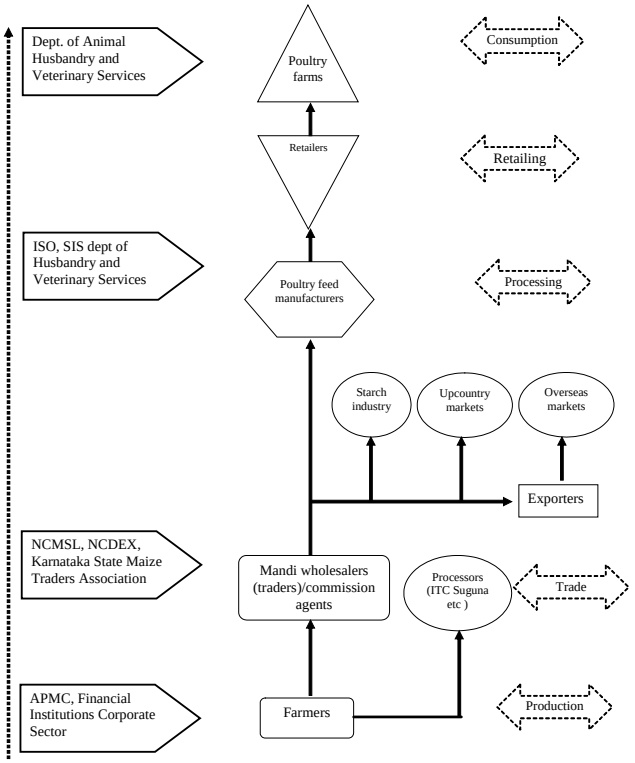

Fig. 1 : Value chain map for maize in Davanagere

Table 1 : Distribution and coefficient of inequality of maize traders in Davanagere market during 2010~11

Size groups (q)	Number of traders	Total quantity (q)	Percentage of traders	Percentage of total quantity	Cumulative percentage of traders	Cumulative percentage of total quantity
0-3000	-	-	-	-	-	-
3001-6000	1	6000	3.33	0.95	3.33	0.95
6001-9000	9	74000	30	11.83	33.33	12.78
>9000	20	545500	66.67	87.22	100	100
Lorenz co-efficient= 0.206						

Table 2 : Forward linkage-preference of maize traders

Processing firm	Nature of linkage		
	Price	Procurement	Payment
Feeds India Pvt. Ltd.	15 (50)	13 (43.33)	11 (36.66)
Gopi feeds	8 (26.66)	7 (23.33)	7 (23.33)
Pragathi feeds	7 (23.33)	10 (33.33)	12 (40)

concentration was less. The results of this study are in line with the results of previous studies by Kiran (2003) and Ravikumar *et al.* (2003).

Forward linkage of maize from Davanagere:

The result of analysis of forward linkage is presented in the Table 2. In the study area price, procurement and payment were the factors on which traders made their decisions to make linkage with that particular poultry feed manufacturing unit. The poultry feed manufacturing units to which the traders sold their stock were Feeds India Private Limited, Gopi Feeds and Pragathi Feeds.

For price reasons, the most preferred feed unit for linkage was Feeds India Private Limited (50 %) as they offered comparatively more price to the traders. It was followed by Gopi Feeds (26.66 %) and Pragathi Feeds (23.33 %). For procurement reasons, the most preferred feed units for linkage was Feeds India Private Limited (43.33 %) as it procured bulk of the produce from the traders. It was followed by Pragathi Feeds (33.33 %) and Gopi Feeds (23.33 %).

Payment was the next basis on which traders rated their preference for a particular feed unit. Good and on spot payment was much expected by the traders. For payment reasons the most preferred feed units for linkage were Pragathi feeds (40 %) followed by Feeds India Private Limited (36.66 %) and Gopi Feeds (23.33 %).

Conclusion:

The Lorenz co-efficient of inequality was found to be 0.206 which revealed that there existed a higher degree of competitiveness for maize in Davanagere as market concentration was less. The maize traders from Davanagere established linkage with the poultry feed manufacturers of the district. Therefore there was a established forward linkage of maize from Davanagere.

REFERENCES

Ravikumar, K.N., Sreelakshmi, K. and Raju, V.T. (2003). Structural performance of groundnut markets in Andhra Pradesh. *Agric. Markt.*, 2 July-September, pp.13-20.

Kiran, D.T. (2003). Marketing of coconut and its products in Karnataka. M.Sc.(Ag.) Thesis, University of Agricultural sciences, Dharwad, KARNATAKA (INDIA).