E-AUCTION SYSTEM IN FCV TOBACCO: A CASE TO BE EMULATED IN OTHER CROPS

B. HEMA, K. VISWANATHA REDDY, Y. SUBBAIAH, D. DAMODAR REDDY AND S. KASTURI KRISHNA

ICAR- Central Tobacco Research Institute, Rajahmundry-533105, Andhra Pradesh

(Received on 10th June 2018 and accepted on 20th June, 2018)

The present study is an attempt to evaluate the e-auction system in terms of the modus operandi of auctioning and the extent to which it has succeeded in offering fair price to tobacco farmers in terms of feedback from Tobacco Board officials, Traders and tobacco farmers. Karnataka Light Soils (KLS) region of Karnataka was selected purposively as a representative study area for e-auction system in FCV tobacco. A total of 10 tobacco farmers from 6 auction platforms in Karnataka constituting 60 tobacco farmers were randomly selected and data was collected through semi structured interview schedule in the year 2018. A total of 20 stakeholders (10 from Tobacco Board and 10 from Trade) were purposively selected to collect feedback from the respondents thus constituting the total sample size of 80 in the present study. The findings from the present study revealed that to keep a check on market flaws associated with the manual auction system, Tobacco Board has introduced e-auction system of marketing in FCV tobacco. This new system has shown positive impact in terms of transparency, automation, time saving, fair pricing and real time availability of information to the tobacco farmers.

INTRODUCTION

Over the past, agricultural marketing in India suffers from inefficiency, a disconnect between the prices received by producers and the prices paid by the consumers, fragmented marketing channels, poor infrastructure and policy distortions. But with the change in time, the role of marketing is fast changing with the modernization in agriculture. Suitable marketing system/channels are evolving to give adequate returns to the efforts of the farmers and it is gradually expanded to commercial crops also. In case of Flue Cured Virginia (FCV) tobacco, leaf is the economic product and manual auction system

was followed in the past for marketing. Manual auction System of FCV Tobacco was started in 1984 first time in Karnataka at Mysore and the later was at Andhra Pradesh in 1985. Manual auction makes it possible to distribute a large quantity of tobacco leaf within a fixed period and in an organized manner. Although manual auction system for sale of FCV tobacco was followed in the past, it had several flaws in terms of trade cartels by buyers, non-transparency, non-fair pricing for farmers, non-traceability, trader monopoly, human errors in manual system and scarce information for stakeholders.

To overcome the flaws associated with the manual auction system and to improve the efficiency in marketing of FCV tobacco, Tobacco Board under the Ministry of Commerce and Industry, Government of India, has introduced the e-auction system of marketing in FCV tobacco in the year 2012. In marketing sector, the e-auction system for marketing of FCV tobacco is the first initiative and it is unique in operation than any other marketing system for commodities like Cardamom, Tea, etc. It is expected that this electronic platform will bring more transparency in the auction process and to eliminate the inaccuracy associated with the manual auction system. Even in plantation crops like tea, manual auction system was following since many years and later introduced e-auction system to bring more transparency so that tea producers get a fair price. However, lack of computer knowledge, network problem, false bidding etc. created difficulties in effective implementation of this eauction (Kakali, 2012). Whereas in case of FCV tobacco, this e-auction system is successful in marketing the produce and fetching good price to the tobacco farmers.

Taking into account, the advantage of eauction system in marketing of FCV tobacco, the present study is an attempt to evaluate the eauction system in terms of the modus operandi of auctioning and the extent to which it has succeeded in offering fair price to tobacco farmers in terms of feedback from Tobacco Board officials, Traders and tobacco farmers.

Methodology

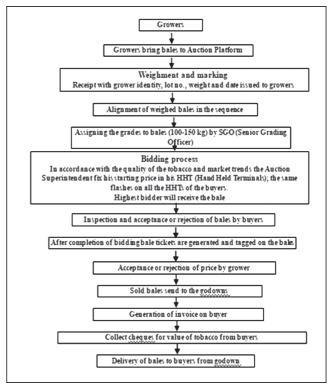
Karnataka Light Soils (KLS) region of Karnataka was selected purposively as a representative study area for e-auction system in FCV tobacco. A total of 10 tobacco farmers from 6 auction platforms in Karnataka (H.D. Kote, Hunsur, Periyapatna, Ramanadhapura, Kampalapura and Chilkunda) constituting 60 tobacco farmers (n_1) were randomly selected. A total of 20 stakeholders [10 from Tobacco Board (n_2) and 10 from Trade (n_3)] were purposively selected to collect feedback from the respondents thus constituting the total sample size of 80 in the present study.

Modus operandi of e-auction system in FCV tobacco

Tobacco growers produce has to undergo grading process according to specifications fixed by the Tobacco Board before offering for sale. First, the bales brought by the growers were weighed before auctioning in the presence of the growers. As Tobacco Board has high tech weighing scales, better transparency is assured to growers in terms of weighment. After the bales are set on the auction platform, the classifier of Tobacco Board opens the bales and takes out samples from 2 to 3 places and assigns the grade. The sample drawn is also displayed on the top of the bale. The grade once assigned will not be changed except by the Senior Grading Officer or the Auction Superintendent. The tobacco buyers shall present on the auction floor and check the tobacco bales for its colour, texture. aroma, flavour, moisture, size, etc. Buyers from different companies from the buying line would take part in auctions process for bidding tobacco bales. The bidding process is very fast and it takes only 4 to 5 seconds for sale of each bale.

In electronic auction system for marketing of FCV tobacco, all the buyers and starters are provided

with electronic device called Handheld Terminals (HHT). All the data of bales offered for sale *viz.*, their weight, lot number, grade and any other remarks are available in all the handheld terminals. By use of HHT, the starter starts a price to a particular lot/tobacco bale and the same appears on all the buyers HHTs and those buyers who are interested on that particular lot will go on adding price in multiples of Rs.1/- and the buyer who quotes highest will be allotted with the bale. This system provides complete transparency in bidding process and facilitates growers to view the bidding process through the electronic displays. The modus operandi of e-auction system in FCV tobacco is given in figure 1.



Source: Tobacco Board accessed on 31-5-2018

Fig. 1: Flowchart of E-auction process in FCV Tobacco

RESULTS AND DISCUSSION

Constraints in Manual Auction System

The different constraints in manual auction system were identified and the respondents were asked to rank the constraints starting from 1= to

HEMA ET AL.

a very low extent to 5=to a very high extent. Total score of each component was taken into account and further compared using Friedman's test and the results indicate that there is significant difference between the constraints expressed by the respondents (Table 1).

The results from Friedman test analysis (Chi Square = 63.83, df = 8, p < 0.05) indicated that the mean ranks corresponding to lack of transparency (mean score 4.55) and no fair pricing for farmers (mean score 4.25) were the severe constraints in manual auction system. As the 'Starter' from the Tobacco Board announces the grade specifications, the prices are put on the produce by the authorized buyers. The farmers cannot get any chance to enquire about the price given to their produce during the manual auction. There is complete lack of transparency in the system and there are chances to bid high price to the selected farmers. Although the guiding factor for setting the starting price is the grade and quality of tobacco, there can be high chances of market gambling in the manual auction system. It was followed by tedious consolidation of price data across auction platforms and trade cartels by buyers are the other major constraints. The manual auction system of FCV tobacco is one sided operation which is mainly in the hands of traders. Undoubtedly this partial system indirectly forms trade cartels among the buyers for self-benefit.

Feedback from stakeholders

For analyzing the multi stakeholders' views, feedback was collected from Tobacco Board officials, Traders and farmers about the introduction of e-auction system. The spread of e-auction system for marketing of FCV Tobacco from Karnataka to Andhra Pradesh in 2012 led to increase in overall efficiency. To analyze the efficacy, Friedman's test was carried out and the mean ranks from high to low were given to the feedback from stakeholders and the results are presented below.

It is clear from the table 2 that farmers are in the opinion that over the years, the agricultural marketing system has created several layers of

Table 1: Severity comparison of constraints based on Friedman's test

(N=80)

S.No	Constraints in Manual Auction system	Mean Ranks		Groups	•
1.	Lack of transparency	4.55	Α		
2.	No fair pricing for farmers	4.25	A		
3.	Tedious consolidation of data across auction platforms	3.75		В	
4.	Buyers forming trade cartels	3.65		В	
5.	Manual system prone to human errors	3.50		В	
6.	Big buyers dominating small buyers	3.05		В	
7.	Scarce information for stakeholders	2.50			C
8.	Discrimination in allotment of bales	1.45			C
9.	No traceability	1.30			C

Table 2: Feedback on e-auction system from tobacco farmers

 $(n_1=60)$

S.No	Feedback	Mean Ranks		Groups	1
1.	Ensures fair pricing for farmers as market intermediaries are excluded	4.87	A		
2.	Transparency in the system	4.79	Α		
3.	Right to reject the price	4.56		В	
4.	Ensure no delay in the release of payments	4.19		В	
5.	Accurate and real-time availability of information	3.99			C

intermediaries, lengthening the supply chain and increasing the opportunity for cartels to form, which in turn drive prices down for farmers and up for consumers. But this new system of eauctioning in case of commercial crop like FCV tobacco is at high advantage to them as this system eliminates them from the clutches of village moneylenders which is witnessed in the other crops grown at the respective agro-ecological regions. In harmony with the quality of the tobacco and market trend, the buyers offer their price in HHT's and if the buyers compete, there is possibility that the price goes higher till the bale is knocked down to the highest bidder. It ultimately ensures fair price to the best quality produce. Now-a-days, the digital media is gaining indispensable role for disseminating information in general and agriculture in particular. In tune with this, the electronic auction system facilitates the prices allotted by the buyers is displayed in the LCD screens arranged at auction platforms which helps in instantaneous information to the farmers during the auction, this is again in tune with nation's priority to digital India indirectly which ultimately provides transparency in the system.

If the farmers are not satisfied with the price allotted, he is having the right to reject the price which eventually goes to scrutiny officer, which is a unique system of agricultural marketing in India.

Unlike in other crops, it is mandatory for all the tobacco farmers to have bank accounts; therefore the amount is directly deposited to their respective bank accounts without any intervention by the intermediaries which ultimately create faith to the tobacco farmers in the introduced new system of marketing in FCV tobacco. Besides it gives immense satisfaction to the farmers, as it is the mandate to release the payment before 15th day of auction. It ensures no delay in the release of payments to the farmers unlike in other crops and also this system provides real time availability of information as the auction platform-wise quantity marketed average price is uploaded in the Tobacco Board website for cross checking the information anytime and anywhere.

It is evident from the table 3 that as Tobacco Board facilitates the marketing between the growers and traders, the field officers from Tobacco Board opined that this new e-auction system eliminates the manual recording of extra auction particulars, thereby no chance of mistakes due to automation. At the same time, there is increasing demand for verifiable evidence of traceability as an important criterion now-a-days and this can be achieved through this new system. Besides, this system facilitates easy and fast consolidation of information across all the auction platforms in all the FCV tobacco growing areas due to automation.

Table 3: Feedback on e-auction system from Tobacco Board stakeholders

 $(n_2 = 10)$

S.No	Feedback	Iean Ranks		Groups	
1.	Eliminates human errors due to automation	4.35	Α		
2.	Brings-in traceability	4.29	Α		
3.	Easier and prompt consolidation of information across Auction platforms	3.40		В	
4. 5.	Facilitate easy payment system and improve overall efficient Facilitates a large number of bid submissions	cy 3.30 3.25		В	(

Table 4: Feedback on e-auction system from Trade stakeholders

 $(n_3 = 10)$

S.No	Feedback	Mean Ranks	Groups
1.	Level playing field for big and small buyers	4.67	A
2.	Real-time collaboration between buyers	3.65	A
3.	Prevents buyer cartelization	2.30	В

HEMA ET AL. 5

It is clear from the table 4 that as this new system does not allow any sort of manual intervention, rather it facilitates both big and small traders to participate in the e-auction. It helps in real time collaboration between them and also prevents group lobbying for self-benefit. The study reveals that e-auction system for FCV tobacco marketing is successful in addressing the conventional market flaws and provides complete transparency in auction process. Benefits of eauction system followed in FCV tobacco marketing include digital advantage, no manual interference, reduces time lags, eliminate skewness in pricing mechanism, make information available instantaneously and no delay in the release of payments. It has greater acceptability among tobacco farmers, Tobacco Board officials and traders owing to its high marketing efficiency. This type of e-auction system with several potential

benefits can be emulated for marketing in other crops of industrial and export value.

REFERENCES

Kakali, H. 2012. A cup of Tea; the market mechanism behind it. International Journal of Commerce, Business and Management. ISSN: 2319–2828. 1(3):140-142. Available online at: https://www.iracst.org/ijcbm/papers/vol1no32012/13vol1no3.pdf

https://tobaccoboard.com/eauction.php

https://shodhganga.inflibnet.ac.in/bitstream/ 10603/138928/14/14_chapter%205.pdf

Tobacco Board. 2012-13. Annual Report. Available online at: https://tobaccoboard.com/tbdata/publicationsfiles/AR_2012-13_1.pdf