

# **SOCIO-ECONOMIC IMPACT OF E-TENDERING SYSTEM ON ARECANUT GROWERS IN KARNATAKA**

## **SUMMARY**

Karnataka is said to be a forerunner among the Indian states to reform agricultural markets. The state introduced e-tendering system to ensure better price realisation for the farmers and encourage fair marketing practices. The system of e-tendering integrates agricultural markets across the state through an online platform and has various advantages over the traditional tendering system in terms of transparency in price discover and reduction in transaction time, besides increasing market competition. Even though the studies regarding the effectiveness and impact of e-tendering system in Karnataka could provide key insights to the policymakers for reinforcing the governments' initiative of e-NAM, such studies are rather scant in literature. In this background, it is imperative to explore the perception of stakeholders about e-tendering system and its socio-economic impact on the farmers. Hence the present study "Socio-economic impact of e-tendering system on Arecanut growers in Karnataka" was formulated with the following objectives.

1. To study the perception of stakeholders about e-tendering system in Arecanut
2. To know the impact of e-tendering system on Arecanut trading
3. To understand the price trends during pre and post e-tendering system in Arecanut
4. To document the constraints faced by the stakeholders and their suggestions for the improvement of e-tendering system

The study was conducted in two major APMCs of Karnataka state, viz., Shivamogga APMC of Shivamogga district and Bheemasamudra APMC of Chitradurga district during 2019-20. These two APMCs were purposively selected since they are the two major markets in the state where Arecanut is traded through e-tendering. The primary data were collected from the stakeholders of APMC who were involved in the e-tendering of Arecanut using a pre-tested interview schedule. From each of these two APMCs, 50 farmers, 10 traders, and 10 commission agents were selected randomly for the interview. Thus, the total sample size was 140. Secondary data on monthly modal prices of Arecanut in Shivamogga and Bheemasamudra APMCs for the last 12 years were collected from the official website of Krishimaratavahini to study the price trend in Arecanut during the pre and post e-tendering period and to elicit the impact of e-tendering system on Arecanut prices. Appropriate statistical tools and techniques were used to analyse the collected data.

## Major findings of the study

The notable findings of the study are as follows:

- Nearly two third of the farmers had medium (65.00 %) perception followed by high (21.00 %) and low (14.00 %) level of perception about e-tendering.
- Majority of the traders (60.00 %) and half of the commission agents (50.00 %) had medium level of perception about e-tendering.
- The important factors influencing the perception of the farmers about e-tendering were Market conduct, Operationalisation, Time saving, Transparency and Competition.
- The major factors influencing the perception of the traders and commission agents about e-tendering were Market conduct, Operationalisation, Time saving, Transparency, Infrastructure and Competition.
- The difference in difference model illustrates that, in comparison to control market (Davangere APMC), the Arecanut prices in Shivamogga and Bheemasamudra APMCs increased by Rs. 2020.18 and Rs. 6332.55 per quintal, respectively during the post e-tendering period exclusively because of the e-tendering system.
- A significant positive impact was observed in case of credit orientation, public recognition, organisational participation and self-sufficiency of the farmers after the implementation of e-tendering. There was no significant impact with respect to their political participation, but a significant positive impact was found in case of overall social impact.
- Marketing cost incurred by the farmers per quintal of Arecanut increased by 34.97 per cent in Shivamogga APMC and 35.56 per cent in case of Bheemasamudra APMC during the post e-tendering period.
- The quantity of Arecanut traded by a farmer increased by 23.15 per cent and 25.02 per cent whereas income accrued per quintal of Arecanut increased by 44.16 per cent and 44.55 per cent during the post e-tendering period in Shivamogga and Bheemasamudra APMCs, respectively.
- The time taken for bid announcement has significantly reduced by 35.34 per cent in Shivamogga APMC and 35.90 per cent in Bheemasamudra APMC during the post e-tendering period. Similarly, the time taken to effect payment reduced by 60.00 per cent and 57.63 per cent in Shivamogga and Bheemasamudra APMC, respectively.
- During the post e-tendering period, the compound monthly growth rate of Arecanut prices (Rashi variety) in Shivamogga APMC increased from 0.34 per cent to 1.06 per cent. Whereas in case of Bheemasamudra APMC, the compound monthly growth rate of price of Rashi variety increased from 0.45 per cent to 0.80 per cent.

- More than half of the farmers were of middle age (59.00 %) group and one third of the farmers had education up to high school (37.00 %) followed by PUC (24.00 %) and graduation (19.00 %).
- Majority of the farmers were of small (42.00 %) farmer category with medium (73.00 %) trading experience. Whereas, nearly three fourth of the farmers had low (70.00 %) cyber proficiency and medium (78.00 %) mass media participation
- Over two third of the farmers had medium (68.00 %) decision-making ability, medium (70.00 %) level of economic motivation and medium (69.00 %) level of innovativeness.
- More than half of the farmers had medium (56.00 %) level of market orientation with medium (65.00 %) level of risk orientation.
- Profile characteristics of the farmers such as education, innovativeness, market orientation and risk orientation were found to be significantly associated with their perception about e-tendering system in Arecanut.
- Frequent price fluctuation was found to be the major constraint confronted by the farmers (I rank) followed by lower bidding of prices for average quality produce (II rank) and transportation cost (III rank).
- Difficulty in rectifying the mistakes after quoting the price (I rank) followed by inability to verify the quality of the produce from a distance (II rank) and frequent price fluctuations' (III rank) were the major constraints encountered by the traders and commission agents with respect to e-tendering system in Arecanut.
- More than two third of the farmers insisted on creating awareness about the operational aspects of e-tendering system among the farmers (79.00 %) followed by making half of the payment in cash for the required farmers (74.00 %).
- A vast majority of the traders demanded a provision to rectify their mistakes after quoting the price (85.00 %) followed by a facility to make price alterations before final submission (80.00 %).