



# Integrated Tea Trading System

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A case study on ITTS (Integrated Tea Trading System) with unique capabilities and standards required to facilitate and streamline all kinds of tea trade auctions & transactions including electronic auctions.

CSM Technologies

East African Tea Traders Association  
(EATTA)

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**Around the world,  
2 billion people drink tea every  
morning. One of the major tea  
producing and exporting regions  
in the world is East Africa.  
Kenya is a tropical East African  
country is the third largest tea  
producer after China and India  
but the largest exporter of Tea  
accounting for 22% of the total  
world tea exports.**





# Introduction

More than 6 million Kenyans directly or indirectly earn a living from tea. The Tea export processes in Eastern Africa is operated by the East African Tea Traders Association (EATTA) based in Mombasa, Kenya, the world's biggest black tea auction centre.

The tea trade processes of the Mombasa tea auction centre are carried out in 3 stages: pre-auction, auction and post-auction stages but all through a cumbersome manual process and not transparent. So to guarantee efficiency, transparency and simplify the three stage tea trade transaction process, "Integrated Tea Trade System" has been implemented to automate the end-to-end trade process for Tea sold in Mombasa Auction.



## Pre Scenario

Even though tea trading is the major foreign exchange earner for Kenya; the challenges faced by the trading companies are numerous. Starting from a lengthy manual process which is a costly, inefficient and ineffective system that cannot deal adequately with transparency, increase in tea volumes and emerging new trends in the production and consumption of tea in the world. Then tea auction process is cumbersome and time taking –from pre-auctioning to post-auctioning, the turnaround time is lengthy putting a strain on the entire auctioning process.

## Challenges

Mombasa Tea Auction Centre has emerged as one of the largest tea auction centres in the world for the amount of tea auctioned every year, however, technological challenges faced by the centre has hindered further scaling up of the tea auctioning business to its zenith. The major challenges are

- Lengthy manual process for auctioning which is not transparent and expensive
- The tea supply chain is not linked to global trading network so failed to respond to emerging demands and global market dynamics

- No automation of the entire process, the entire auction works on open outcry model
- No guarantee on efficiency & transparency of the auction method

## Solution

Integrated Tea Trading System (ITTS) is developed by CSM in partnership with Eastern Software Systems Africa, has automated the tea trade system for East African Tea Traders Association (EATTA), the nodal agency for operating tea export processes in East Africa and transitioned the auction system from open cry to e-Auction method.

ITTS provides a suite of business applications with unique capabilities and standards required to facilitate and streamline all pre-auction, auction and post auction tea trade transactions including the option of an electronic auction. The application includes business applications for Producers, Brokers, Buyers, Warehouses, Banks, Transporters and Packers to interact with the system and perform various tea trade functions and transactions.

Tea auction has multiple stakeholders involved. So ITTS has given emphasis on the major business critical areas.





- **Membership Management:** It supports a robust governance framework where existing tea trade business rules relating to membership parameters is incorporated into the system and controls member registrations and their respective roles.
- **Catalogue Management:** The categorization of tea is important for auction. A proper cataloguing helps in managing the pre-auction, auction and post catalog by brokers to different stakeholders – producers, brokers, buyers and banks based on their role in the value chain.
- **e-Auction:** This is one of the important function of EATTA that implementation of ITTS has made simple. This manages the electronic and real time bidding at increased speed and efficiency besides facilitating price discovery. e-Auction function to enable both electronic auctioning and bidding by brokers and buyers respectively.
- **Business Management:** Managing tea trade transaction post auction like sales order, dispatching invoice, payment confirmation and tea release documents which are essential at every auction point and takes a lot of manual work and time has been made easy by ITTS. It has also integrated payment gateway to enable banks to confirm receipt of payment of teas from buyers.

## Post Scenario

Implementation of IITS at EATTA has helped electronic and real time bidding at increased speed and efficiency besides facilitating price discovery apart from automating the end-to-end trade process for Tea sold in Mombasa Auction. While the tea trade cycle time has been reduced to 40%, the price for preparing a catalog and managing the same has also been reduced. The solution also enabled EATTA to make ready a match between buyers and sellers, preset bidding by providing a facility to automate individual bids before actual auction commences.



## The other major benefits include

- Reduction of overall tea trade cycle time by 40%
- Reduction in catalog preparation and management costs
- Reduced time period between teas offered to broker and catalog closure
- Shortened period between catalog closure and auction date by 50%
- Massive reduction in document preparation and handling costs
- Increased auction speeds from 3 lots/min to 5 lots/min
- Real-time results dissemination
- Increased transparency through built in audit trail reports and analytics.
- Create opportunity to increase trading windows, increase buyer/producer participation and volumes of teas traded at the auction.
- Improve the quality and speed of access to critical tea trade reports and statistics
- Improved traceability and supply chain visibility





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