

# EAST AFRICA REGIONAL MARKET-LED TEA SUPPLY ASSESSMENT









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STUDY

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## Acronyms

AFA	Agriculture and Food Authority
AFA TD	AFA Tea Directorate (formerly Tea Board of Kenya – TBK)
AFA	Agriculture & Food Authority
AMCO	Agriculture and Marketing Cooperative
BBN	Burundi Bureau of Standards and Quality Control
BDS	Burundi Bureau of Standards
BMF	Brocken Mixed Fiber
BRB	Burundi Central Bank
BSO	Business Support Organisation
CEO	Chief Executive Officer
CNATHE	National confederation of the Associations of Tea Growers (Burundi)
CRF	Coffee Research Foundation
CSR	Corporate Social Responsibility
СТС	Crushing, Tearing & Curling
DfID	Department for International Development
EATTA	East Africa Tea Trade Association
EPC	Export Promotion Council
EPK	Eastern Produce Kenya
ETP	Ethical Tea Partnership
EU	European Union
FKE	Federation of Kenya Employers
FT	Fairtrade
GIZ	Gesellschaft für Internationale Zusammenarbeit
HACCP	Hazard Analysis and Critical Control Points
ISO	International Organisation for Standardisation
KALRO	Kenya Agriculture and Livestock Research Organisations
KALRO TRI	KALRO Tea Research Institute (formerly Tea Research Foundation of Kenya – TRFK)
KAM	Kenya Association of Manufacturers
KARI	Kenya Agricultural Research Institute
KEBS	Kenya Bureau of Standards
KEPHIS	Kenya Plant Health Inspectorate Service
KEPSA	Kenya Private Sector Alliance
KETEPA	Kenya Tea Packers Limited
KPA	Kenya Ports Authority

KPLC	Kenya power and Lighting Company
KTDA	Kenya Tea Development Agency Limited
KTGA	Kenya Tea Growers Association
MASL	Meters Above Sea Level
MSC	Mkonge Smallholders Cooperative
MSME	Micro, Small and Medium Enterprise
MSTA	Mombasa SME Tea Association
MT	Metric Tons
NJOTCDJE	Njombe Tea Cooperative Joint Enterprise
NOSC	Njombe Outgrowers Service Company Limited
NTZDC	Nyayo Tea Zones Development Corporation
OBR	Burundi Revenue Authority
OEP	Outgrowers Empowerment Project
ОТВ	Office of Tea, Burundi
PPP	Public Private Partnership
PSTA	Purple and Speciality Tea Association
RA	Rainforest Alliance
RSTGA	Rungwe Smallholders Tea Growers Association
SCDA	Special Crops Development Authority
SME	Small and Medium Enterprise
SPS	Phytosanitary
SQMT	Standardisation, Quality Assurance, Metrology and Testing
TASTGA	Tanzania Smallholders Tea Growers Association
TAT	Tea Association of Tanzania
ТВА	Tea Buyers Association
TBrA	Tea Brokers Association
ТВК	Tea Board of Kenya
TBS	Tanzania Bureau of Standards
ТВТ	Tea Board of Tanzania
TD	Tea Directorate
TISI	Trade, Investment and Support Institution
TPA	Tea Packers Association
TRFK	Tea Research Foundation of Kenya
TRI	Tea Research Institute
TRIT	Tea Research Institute of Tanzania
TSHTDA	Tanzania Smallholders Tea development Agency

TTGA	Tanganyika Tea Growers Association
TWA	Tea Warehouse Association
TWFA	The Wood Foundation Africa
UK	United Kingdom
USA	United States of America
USAID	United States Agency for International Development
UTT	Unilever Tea Tanzania
UTZ	UTZ Certified
VSC	Voluntary Standards Certification
WFTA	Woods Foundation Trust Africa
WTE	Williamson Tea Estates (K) limited

## Definitions

**Black CTC tea** is the type of tea manufactured predominantly in the East African Region. The source of raw materials are green tea leaves from the tea bush, Camellia Sinensis, Variety Assamica. The tea is processed through the Crushing, Tearing and Curling (CTC) method in the following stages;

- **Withering**: partial removal of water to 65 70% moisture content by blowing cold or hot air through the leaves, to make the leaves flaccid for next step;
- Maceration and Cutting: maceration through Rotorvanes to squeeze the liquid contents of the leaf and cutting through Crushing, Tearing and Curling, to get fine and 'rolled' particles;
- Fermentation: oxidation of the components of the tea leaves for 90 150 minutes using forced aeration, colour changes from green to orange/brown;
- Drying or Firing: removal of water from fermented tea particles to a level of 3 5% for keeping quality of the tea, colour changes to black;
- Sorting/Grading: separating in to different grades based on fibre content and size of particles as shown in table below;

Primary grades; with less fiber content	Secondary grades; with more fiber content
BP1; large well rolled granules	BP; bold rolled granules, bigger than BP1
PF1; large open particles; makes the highest proportion of tea	Fanning (F); small open particles with mixed with fibre
PD: small rolled granules	Dust (D); very small rolled granules and open particles, mixed with fine fibre
Dust1 (D1): very small rolled granules	Broken Mixed Fibre (BMF); long stalks and fibre
	Others which are variants of above include; BP2, PF, PF2, PD2, F1, F2, Dust2, BMF1 and BMFD

Table 1 Description of Black CTC Grades

Other types of teas are defined as **Speciality Tea** such as:

- Green CTC Tea: prepared as black CTC tea, but does not undergo through fermentation (oxidation), leaf is steamed before maceration to stop oxidation;
- Orthodox Tea: tea prepared by passing the leaves through 'Pressurized Rollers', where they are twisted and broken to make different grades, instead of maceration and cutting in CTC rollers; could be black (fermented) or green (unfermented);
- White Tea: tea prepared directly by rolling the tips or terminal buds of the tea leaves and then drying (mainly sun drying);
- Purple Tea: a tea bush variety developed by the Tea Research Institute (TRI), then Tea Research Foundation of Kenya (TRFK)<sup>1</sup>, whose leaves are purple in colour, instead of green and the tea made has high content of Anthocyanins.<sup>2</sup> These are diverse flavonoids that are soluble in water. They are also powerful antioxidants and have health enhancing properties. Anthocyanin supplements (pro Anthocyanins) are widely marketed for their health enhancing properties and are also widely used as preservatives especially in the food industry. The new tea variety that is rich in Anthocyanins provides an alternative raw material from which these flavonoids. The leaves can be processed through CTC or Orthodox or from the tips.

<sup>&</sup>lt;sup>1</sup> TRFK Pre-Releases Purple Tea Variety for Processing a Health Tea Product; Tea Journal, Vol 30(2), 2009.

<sup>&</sup>lt;sup>2</sup> Facts on the Kenyan Purple Variety, TRFK 306; S. Kamunya and R. Chalo; Tea Research institute, January 2019.

### Executive summary

#### World Tea Overview

Between 2006 and 2016, the world tea production increased by 4.4% annually to reach 5.73 million tonnes while global consumption increased annually by 4.5% to reach 5.5 million tonnes.<sup>3</sup> Production is dominated by China (42.6% of the total output) whose production more than doubled from 1.17 million tonnes in 2007 to 2.44 million tonnes in 2016, and South Asia (40%), notably India and Sri Lanka. Africa accounts for around 20 - 23% of global production, dominated by Kenya (13%). Black tea leads the global tea market segment accounting for 60% of the total tea market, followed by green tea (30%) and specialty teas (10%). Global production of black tea is forecast to rise by 2.2% on an annual basis over the next decade to reach 4.4 million tonnes in 2027, mainly driven by Kenya, China and India. Global output of green tea is foreseen to increase at an even faster rate of 7.5% annually to reach 3.6 million tonnes in 2027, largely driven by China.

There was significant growth in demand in most tea producing countries such as Asia, Africa and Latin America. Consumption in China expanded at an annual rate of 10.1% reaching 2.1 million tonnes in 2016, while India, had the second largest tea consumption in the year, reaching 1.05 million tonnes, accounting for 19% of the global total. Black tea consumption is projected to grow at 2.5% annually to reach 4.17 million tonnes in 2027 with the largest expansion in China. African countries are expected to show higher growth in their consumption, while traditional importing countries in Europe (except Germany) and the Russian Federation have recorded a decline. Tea consumption in Europe has reached maturity and per capita consumption has been declining due to competition from other beverages, particularly bottled water and carbonated drinks. For the Russian Federation, the decline in oil prices has negatively impacted on the country's tea imports. Health is one of the factors influencing tea consumption rise as consumers become aware of the health benefits of tea, the beverage's anti-inflammatory, antioxidant and weight loss effects, factors which shall be key drivers of future consumption growth.

The world tea production and consumption is projected to further increase over the next decade, driven by rising demand in developing and emerging countries, especially India and China. The upward trend is attributable to a combination of higher incomes and a diversification criterion, especially in China, where rather than green or instant tea, there has been emphasis on specialty items such as herbal teas, fruit fusions and flavoured gourmet teas. Black tea exports are projected to reach 1.66 million tonnes in 2027 with positive but weak growth rates projected for Africa's producing countries (0.91%), Kenya maintaining its leadership with an average annual growth rate of 2.89%. Major exporting countries are expected to remain the same, with Kenya being the largest exporter followed by China, India, Sri Lanka, Argentina, Vietnam, Uganda, Tanzania, Rwanda and Malawi.

#### East Africa Tea Overview: Production and Processing.

The East Africa (EA) region is the third largest producer of tea in the world, accounting for 20 – 23% of the total production.<sup>1</sup> Kenya dominates production with output of over 490,000 Metric Tonnes (MT) in 2018, which is two-thirds of the African output. Uganda and Malawi are the next largest producers, with output of around 50,000 - 55,000 MT, followed by Tanzania, at 30,000 – 36,000 MT, to make among the top ten of the highest tea producers in the world. Other producers in the region are on a small scale (15,000 - 30,000 MT). Small amounts of tea are produced in West Africa, in Cameroon (less than 10,000 Metric Ton (MT) per year), while Egypt, Morocco & Ethiopia export small volumes from imports. Production in the East African Community (EAC) region has varied from year to year and can fall by up to 20% during poor weather conditions.

The main type of tea bushes grown in the region are of the variety *Camellia Sinensis* variety *Assamica*, which originated from India. It is predominant due to its high yield potential. Tea is grown on deep and well drained tropical red loam soils, mixed with volcanic soils found in high

<sup>&</sup>lt;sup>3</sup> Global Tea Production and Consumption Rises, According to FAO; Food Business Africa, June 14, 2018

altitude areas. The suitable soil PH range is slightly acidic, between 4.5 and 6.5, beyond which, the tea is retarded. The best altitude range is between 1,500 m and 2,250 m above sea level. The bush does well in an environment with well-distributed rainfall ranging from 1,200 mm to 2,500 mm annually with long sunny intervals. The right temperature for tea growth ranges from minimum of 12 °C to a maximum of 28°C.

Tea production and processing in EAC is organised under numerous different models in the individual countries.

In **Burundi**, the tea industry is largely under the control of the government through the Office of Tea Burundi (OTB), which manages five tea factories: Buhoro, Ijenda, Rwegura, Teza and Tora. Another player in the tea industry is the private company, Prothem Usine, with one factory, Gisozi. Tea in the country is cultivated in three regions, namely the north west region of Mugamba, which is located in high mountain areas, central region of Mwaro Province with medium altitude and the south west region of Mumirwa located in low altitude area. There are over 66,000 smallholder tea farmers, organised in 421 farmers' associations. The total land under tea cultivation is 10,600 Ha of which 1,920 Ha is in industrial blocks and 8,680 Ha is with smallholder farmers. Smallholder farmers have small land sizes cultivated with tea, ranging between 0.1 to 0.3 Ha and their productivity is also low at average of 926 kgs made tea per hectare, being only 60% of what is achieved in the estates. All the factories process black CTC tea, except Buhoro, which produces little green tea for domestic market.

In **Kenya**, tea is grown in the highland areas; the major tea producing areas are in the highlands in the East of Rift Valley; Aberdare Ranges, slopes of Mt. Kenya and Nyambene Hills, and in the Rift Valley and West of Rift Valley; Mau Escarpment, Kericho and Kisii Highlands, Nandi Hills, Western Highlands and on the slopes of Mt Elgon. Tea is produced by two types of producers; smallholder farmers with small size land holding at average 0.2 Ha per household, for a total of 141,800 Ha and large plantations with hundreds to thousands of hectares, with total of 92,500 Ha. Smallholder producers, mainly managed by KTDA Ltd, have relatively high yields, at average of 1,922 kgs made tea per hectare (2018), but below that of estates with 20% and collectively account for 56 – 60% of the national production. The plantation sector is mainly private and accounts for the rest 40 – 44% of the national production. There are 124 tea processing factories which make black tea through the CTC method, but some have fitted a separate line for processing speciality tea such as CTC Purple, Orthodox (black, green and purple), oolong and white teas.

In **Tanzania**, tea is produced in three zones; Southern Highlands Zone, which produces over 70% of the national tea production, Northern Zone, which produces 28% of the national production and Northern West Zone producing only 2% of the national tea production. The total national land under tea cultivation is at 22,742 Ha, divided on a 50:50 ratios between the two segments. However, for production, the distribution is 70:30 in favour of the plantations. This demonstrates the lower productivity of smallholder farmers at average of 954 kgs made tea per hectare (2018), being 60% of the yield from estates. The smallholder farmers are organised under the Tanzania Small Holder Tea Development Agency (TSHTDA) for government support to improve on productivity, production and quality of tea. There are 22 tea processing factories, all manufacturing black CTC teas.

#### East Africa Tea Overview: the Tea Trade

Tea trade in the region is facilitated by the East African Tea Trade Association (EATTA), which is the umbrella body that represents the interests of the tea industry in Africa. It has members in nine countries: Burundi, Democratic republic of Congo, Ethiopia, Madagascar, Malawi, Kenya, Rwanda, Tanzania and Uganda. The main market outlet for EA is through the Mombasa Auction, run by EATTA, where over 95% of smallholder tea output is sold. For estates 40% is sold at the auction while 60% is exported directly to buyers overseas or parent companies. It has grown to be the largest auction centre in the world.

There are a total of 11 registered companies who operate as Tea Brokers at the Mombasa Tea Auction. Tea brokers assist in selling tea on behalf of producers in addition to tasting tea for quality verification; evaluating tea quality based on seasons and prevailing market conditions; assessing the best prices for different tea qualities; and supervising the correct handling and market transactions of tea sold in the auction. They also visit the factories to check and advise on manufacture of quality tea.

There are over 50 tea buyers who bid for tea in the auction for export. They represent their clients from all over the world. Their clients are typically not the end consumers but rather tea packers, locally & international and other actors who further add value to tea through blending or manufacturing beverages and other tea-based by-products. They play the important role of linking tea producers to foreign blenders and consumers and they can also be instrumental in facilitating access to new foreign markets. The major global tea buying companies have agents or representatives in Mombasa such as Lipton, Global Tea Commodities, Tetley Tea, Finlay's and Van Rees.

There are ten major tea packing companies, who are registered members of EATTA. In addition, there are 31 tea packers in the Small and Medium Enterprises (SME) category in Mombasa. The majority of these packers' source most of their tea from the buyers in the auction, and only few buy directly in the auction. They also buy tea directly from the factories through the Direct Sales window. Most of the tea bought is for export, but they also pack for local market through their own brands or by selling to smaller packers. In Burundi, there are three packers for domestic tea market. In Kenya, there are over 250 registered tea packing firms, who range from big multinational companies, through medium companies to small and micro firms with localized distribution in cities and big towns. There are 25 firms (factories, cottage factories and packers), packing purple and speciality teas, mainly for the export market. In Tanzania, there are eight tea packing factories that blend and pack teas for local consumption, while one packs for both local and export markets.

#### International Trends of Tea Demand for EA

EA is dominated by tea production as compared to tea consumption. Domestic consumption in the region accounts for average of 6%, meaning that the rest 94% is exported. Over 70% of the exported tea is sold in bulk through the Mombasa Auction. The tea from the region continues to be in high demand both for its quality and for year-round consistent supply. The region accounts for 30% of global black tea exports, hence has a dominance in the tea drinking world. In particular, for black tea, which is the overwhelming majority of tea drank in the world, East African tea accounts for 98% of the tea taken in Sudan, 90% in Egypt, 70% in the United Kingdom (UK) and 75% in Pakistan.<sup>4</sup> The demand in these traditional destinations is steady, but at fluctuating prices. The main demand has been for clean good quality primary grades, suitable for tea bag markets, but there is emerging demand for new varieties especially green, purple, instant tea and herbal infusions for millennials, the urban affluent and the growing middle class. There is also a growing demand for high-end teas and healthy blends.

#### Strengths and Advantages of the EA Tea Supply Chain

The region has some strengths and advantages that make it a preferred choice for sourcing tea for other parts of the world. The tea is grown at high altitude and majorly by smallholder farmers, who practice fine plucking of two leaves and bud, which make the tea of high quality. There is no application of agrochemicals, except for inorganic fertilizer during growth, hence, the tea is pesticide-free. Almost all tea producers and factories have implemented one or multiple voluntary standard certification schemes such as Fairtrade. Rainforest Alliance (RA) and UTZ Certified, as well as on quality management system, based on the International Organisation for Standardisation (ISO 9001) and food safety management system based on ISO 22000 and Hazard Analysis And Critical Control Points (HACCP) principles, which ensure the sustainability of tea production. The Mombasa Auction is the largest centre for black CTC tea in the world in terms of volume. Though the tea is predominantly black CTC tea, production and supply of speciality teas is increasing. The regional tea supply is all year round, as compared to other auction centres which have seasonal supply, which enables buyers to meet their quantity demands at any time of the year. The tea is of diverse quality as it comes from different countries, which assures buyers that they will meet their blending requirements in one source, hence assuring a consistent final product to their consumers all over the world. High levels of traceability of the tea sold at the auction and through direct sales is assured as teas are identified by auction lot number, garden invoice number, name, country of origin, grade and year of manufacture and

<sup>&</sup>lt;sup>4</sup> International Tea Council Tea Statistics Bulletin 2017

all this information is imprinted on each package of a lot and on the brokers selling catalogue. The supply chain is organised and well-coordinated, which helps to build confidence, reduce costs, improve efficiency and provide better customer service. This has also helped to create the mutual trust that has been driving the tea trade; the business thrives on mutual trust to honour commitments, but East Africa Tea Trade Association (EATTA) is there to ensure actors play by the agreed rules. The auction is sited at the coastal city of Mombasa, which has a large port with big capacity and is geographically well located for shipments to all parts of the world; all major shipping lines have a presence in Mombasa. The city has good and improving tea handling facilities within one place, such as warehouses, transportation facilities, tea blending facilities, packing facilities, supplies of needed materials and skilled and experienced labour. There is high transparency in the tea business; after auction, buyers are required to pay for the tea within two weeks and can only collect the tea after full payment. If the buyer fails to pay within the time span, the broker is required to pay for the tea; to ensure this, brokers have a bank guarantee.

#### Constraints and Challenges in the EA Tea Supply Chain

Despite the many strengths and advantages, the tea value chain is also constrained by multiple challenges. The large quantity of tea offered in a single market window in bulk, leads to prices that are relatively low compared to the quality of the tea and at times some tea is not absorbed. Since tea growing is rain fed, there is high variation in volumes produced and offered in the market between different seasons A small proportion of the tea offered in the auction is of lower quality, which tends to pull the prices downwards, and this tea has inconsistency quality due to uneven control of quality processing parameters and overcapacity in processing factories, especially during high growing seasons, creating lack of confidence in some buyers. Due to the irregular supply, the prices realised are unstable; for example, in times of declining quantities, prices lag in responding. as bidding is done manually, the auction takes too long during periods of high quantities, players (brokers & buyers) become fatigued and this affects trading. During high seasons other infrastructure such as warehouse space are overstretched and limited. The industry is highly volatile to the political situations of the supply and demand in producer and consuming countries; for example, dollar sanctions to Iran and Sudan by USA, who used to be a major tea buying countries in the auction, but now have little activity.

There are also specific constraints for the industry in each country:

#### In Burundi:

- Low productivity at the farm level, leading to low returns to farmers, which discourages them from investing in tea production and adopting good agricultural practices to improve quality;
- Low and inconsistent quality due to green leaf over shooting processing capacity and inconsistent control of processing parameters;
- Limited knowledge and lack of exposure of staff in the field and in factories as most knowledge is passed through infrequent brokers visits to factories and rare training events;
- Poor infrastructure within the factory catchments which leads to delay in green leaf reaching the factory, causing loss and lowering of quality;
- Unstable power supply to the factories leading to frequent power interruptions which lead to lower quality and high costs with use of diesel generators; Imposition of taxes and levies for tea, high transport and associated costs of tea to the auction;
- Lack of research in tea matters to improve productivity, quality, resistance to pests and diseases, tolerance to drought and fast canopy establishment;
- Large part of the tea industry is run by government, unlike in other countries, which is not efficient in business management;
- High cost of certification implementation and auditing as well as lack of professionals in the country, meaning trainers and auditors have to come from outside the country;
- No regulator to drive privatisation and support the new entrants to the tea industry;
- High cost of inputs such as fertilizers.

#### In Kenya:

- Small pieces of land and farm sub division for smallholder farmers that are uneconomical for tea growing, making farmers get disenfranchised;
- Governance structure of the smallholder tea factories leads to boards that mainly care for the short term performance of the factories and immediate payment of the farmers, rather than growth and sustenance of the business;
- Inadequate plucking labour especially during high crop peak periods, forcing some producers especially in the plantations to adopt use of plucking machines, which leads to low quality of tea, whereas mechanization is not feasible for smallholder farmers with very small parcels of land;
- Licensing of processing factories with little or no green leaf supply, leading to unfair competition for the green leaf available, hence, factories accepting low quality green leaf and leading to lowering of quality of tea made;
- Threat of termination of leaseholds of the land under tea and forced acquisition of land from multinational companies by county governments;
- Poor infrastructure in the factory catchment, especially on roads and bridges, making some areas inaccessible and leading to delays in green leaf collection to the factory, lowering of quality and loss of green leaf already harvested;
- Climate change unpredictability in weather and seasons leading to unpredictability in undertaking of farm activities;
- Generational change lack of interest of the young generation in managing tea cultivation.

#### In **Tanzania**:

- Inadequate government tea extension services to smallholder farmers. Advice is given through general agricultural officers, which is not effective as they are few, not well trained, not experienced and specialized in tea husbandry and which results in low yields;
- High cost of inputs such as fertilizers due to low economics of scale farmers are few and expansively spread in the country;
- Most tea growing areas experience unimodal type of rainfall, which is very heavy and over a short time. Due to porous soils, this results in high leaching of nutrients, hence the need for high rate of application of fertilizers to replenish. Old bushes and mainly of the seedling variety, especially in estates, hence low productivity and quality;
- Smallholder farmers are organised in associations that have not been found to be
  effective in serving farmers to get returns on tea production;
- Inadequate and high cost of plucking labour for estates, which have adopted mechanization. This has lowered the of the tea quality and it is not feasible for smallholder farmers;
- High cost of certification and little tea bought as certified to attract premium and/or high prices;
- Low prices of tea at the auction as the country teas are put in the category of plainer and lower mediums;
- Climate change leading to decreased productivity and production and requirement for more inputs such as water for irrigation;
- Problem of sizing capacity of factories during high crop season processing facilities are overstretched and during low production, facilities lay idle, which is made worse by ageing and inefficient machinery in factories;
- Erratic and unreliable power supply especially during rainfall, leading to high cost and lower quality in factory processing,
- Imposition of taxes and levies for tea at the auction, high transport and associated costs of tea to the auction, many requirements for border clearance during tea transport to the auction such as certificate of origin, export permit, phytosanitary certificate and fumigation certificate;
- Low returns especially to smallholder farmers due to low prices of made tea in the market and high cost of inputs that is received in small batches, which is not good for investment,
- Limitation to set blending and packing facilities in the processing factories for value addition and product diversification to improve on income and returns;
- Existence of some government taxes which discourage investment especially high capital like construction of factories. Agribusiness is assessed with same yardstick as other businesses, without noting its other social impacts like creating employment and wealth in rural areas;

- Smallholder tea sold as the mark of the factory which combines with estate green leaf, hence any quality effort and achievement by farmers is lost in the blend and stringent quality requirement on smallholder farmers by factories does not translate to better payment for green leaf;
- Limited research on tea matters due to limited funding as Tea Research Institute of Tanzania (TRIT) is funded entirely by the tea industry players;
- There are also challenges at the trade level of the value chain as follows.

#### Warehouses:

- Stringent Government trading regulations and procedures especially on the handling of foreign tea;
- Costly warehousing and tea handling infrastructure requirements by the producers, buyers and final consumers - most warehouses have asbestos roofing that have been condemned by food safety standards and companies have found it difficult to replace the roofs.

#### Brokers:

- High losses due to some buyers being forced out of business by stiff and unfair competition, hence, brokers have to pay for the tea sold in the auction and re-selling it at lower prices;
- Short prompt date of 10 days after the auction, yet buyers overseas require longer credit period;
- High withdrawals during auction especially during periods of high volume, some teas do not fetch the reserve price of the producer and are not sold;
- High volume of tea sold through the direct sales window, hence reducing offers in the auction.

#### Tea Buyers/Exporters:

- Shortage of foreign currency, yet tea is bought in United States (US) dollars at the auction;
- Restrictions in the export markets based on issues such moisture content, Maximum Residual Level (MRL), Good Manufacturing Practices (GMP), high duties, long clearance processes, high cost of compliance and quality assurance;
- External factors affecting shipment of teas that are beyond the control of the buyers such as pirates, terrorists, conmen, sanctions and delays at border points;
- High cost of credit from local banks and demand of high credit for long periods by the buyers and packers overseas, while the prompt date for tea buyers is ten days after the fall of the hammer in the auction, most overseas buyers demand credit for 30 – 45 days and some going up to 120 days, which requires high working capital, which is expensive;
- Limited market outlets, where the first five destinations, UK, Pakistan, Egypt, Afghanistan and Sudan account for over 80% of the sales;
- Difficult and costly to open new markets, for example to west Africa, due to lack of coordinated support by governments and trade and non-trade barriers by major players already in these market; every market destination is different and has to be handled differently with unique strategies;
- Lack of bilateral agreements and imbalance in trade, e.g. with China, and restrictive practices;
- Demand by the major retailers and supermarkets for the buyers to promote the tea on the selves within their premises and refresh the stocks which is expensive;
- Expensive to participate in exhibitions and trade fairs to promote the tea from the region,
- Lack of mechanisms to ensure payment of tea delivered to overseas buyers and packers, leading to non-payment for teas delivered and loss;
- High cost for value addition due to high cost and unavailability of quality packing materials, lack of government support for example in lowering duty for packaging materials and promoting tea through the embassies overseas;
- High rejections and claims for compensation, putting the local sellers/exporters (buyers at the auction) at the mercy of buyers overseas.

**Buyers/Exporters/Packers** in the **Micro, Small and Medium Enterprises (MSME)** category face specific challenges over and above those met by buyers and exporters such as;

- Curtailed potential to grow nor enter new markets due to unfair competition by the big buyers, who can significantly reduce their prices and offer long credit periods;
- Limitation of access to already established mature markets due to protection by established exporters, hence relegated to new markets that are also difficult, expensive and risky to penetrate;
- High squeeze by the demand for long credit periods as they do not have adequate resources;
- Lack of affirmative support by governments to access to low interest credit, access to low cost and high quality packing materials by lowering import duty, lower taxation or relief on domestic tea market, access to export market, and offering export compensation guarantees;
- Expensive to buy blending and packing equipment;
- Lack of access to finance as banks require letters of credit, order or collateral, which MSMEs do not have.

**Speciality and Purple Tea Packers/Exporters** also face unique challenges over those of MSMEs and buyers such as;

- Markets for the purple and specialty tea not well defined, hence each packer looks for their own market;
- There is no standard definition of speciality tea and no standardisation of processes and parameters to ensure standard products that can be sold through the auction;
- Requirement of a high minimum price for the tea to be labelled specialty tea;
- Still nascent sub-sector with no capacity to run common affairs through their association;
- Capacity constraints on the personnel within value chain as there is limited knowledge, skills and experience in processing, quality control and tasting evaluation of speciality teas and lack of code of conduct to guide the members.

#### Opportunities in the EA Tea Supply Chain

The challenges facing the tea industry also offers the opportunities of enhancing market access for tea produced in the region.

#### Opportunities at the regional level:

- Education and training to professionalize tea business through training programs, modules and short courses and development of curriculum for training on tea processing, tea tasting and blending and establish training materials (manuals), undertake onsite and online training and learning/ exchange visits;
- Research and consultancy to expand the business and funding of EATTA and give better services to members;
- Automation of auction and processes to reduce costs and auction time (currently ongoing);
- Product diversification from black CTC tea to other types of tea such as orthodox black as well as CTC and orthodox green and purple tea, white tea, herbal tea infusions and other tea products for both domestic and export markets, Marketing and product development for new markets;
- Set futures market to improve on predictability of tea prices; Promotion and expand domestic consumption of black and specialty tea;
- Create a free trade area for Africa by removing tariffs, quotas and trade and non-trade barriers between countries in the continent;
- Harmonize implementation of multiple voluntary certification standards to minimize time, efforts and costs;
- Create level playing ground and ensure all actors play by the rules and policies to prevent undercutting and allow MSMEs to thrive;
- Support for MSMEs (independent tea factories, cottage factories, packers, exporters and firms offering services to the industry) with capacity building in business planning, access to finance, business solutions and finance. Establish an European Union (EU) based tea logistics hub, whereby full containers could be shipped and the tea stored for sale within the EU market, particularly beneficial in targeting speciality tea customers, many of which are boutique tearooms, stores or brands.

The country-specific opportunities are addressed below:

#### Burundi:

- Privatisation of the tea industry and setting up of the necessary legislation to support the tea industry's growth and attract more players and investors;
- Modernisation and expansion of factory processing machineries to improve efficiency, lower cost of production, get consistency of quality and improve quality;
- Training and capacity building of agriculture and factory processing staff and visits to other countries;
- Introduce processing of specialty tea and value addition of black CTC tea and Establishment of tea research facilities in the country.

#### In Kenya:

- Review of tea regulations through stakeholders' participation to align them with current situation of the industry;
- Strict enforcement of regulations to ensure adherence by all producers to prevent hawking and side selling of green leaf and illegal importation of inferior quality teas which lowers national tea quality;
- Establishment of a Common User Blending and Packaging Unit in Mombasa;
- Promotion of speciality and purple tea through development of processes, standards, markets and database on quantities and qualities available as a precursor of establishing auction;
- Setting up of an Incubation Center to promote processing of purple and specialty tea.

#### In Tanzania:

- Increasing value of tea and doubling national production through supporting smallholder farmers to expand area under tea cultivation, improve productivity and increase quantity and quality of tea;
- Expanding and improving factory capacity and attract investors to put up new factories with joint ownership with smallholder farmers;
- Modernisation of factory processing machineries to improve efficiency, lower cost of production, get consistency of quality and improve quality;
- Advance research on planting materials with high productivity, high quality, faster canopy establishment, resistance to pests and diseases and tolerance to drought, address climate change impacts and also research on factory processing to improve productivity and efficiency in processing of black and specialty teas.

At the trade level of the value chain, opportunities with players are as follows:

#### Warehouses:

- Introduce package of services for MSMEs and independent factories such as contract blending and packing, sampling and free storage;
- Diversification of products to other neutral commodities that have no effect on quality and wholesomeness of tea to use space during lean periods;
- Adopt new and modern technology stacking systems with barcodes to increase storage space upwards, improve traceability and give fast efficient services, and open bonded warehouses to increase storage space at other ports like Dar Es Salaam and dry ports like in Nairobi and Naivasha.

#### Tea Brokers:

- Develop specialised service package for MSMEs such as tasting and advice on blends at friendly costs;
- Promotion of purple and specialty tea, locally and abroad;
- Free inspection visits to independent and cottage factories.

#### Buyers/Exporters:

- Promotion of tea to non-traditional markets such as Russia, China and Japan, West Africa and Qatar;

- Increase proportion of tea that is exported in value added form, such as small pack sizes for placing on supermarket shelves of destination countries;
- Promotion of new tea products such as tea extracts and herbal infusions;
- Promotion of mark of origin to retain the identity and superior quality of tea after auction;
- Collective approach to lobby governments for removal of trade and non-trade barriers, county governments to remove levies, banks for low interest credits and friendly financial products;
- Code of conduct on the business and regulations on auction and enforcement of protocols by all players for smooth running of the trade;
- Organise missions to buying countries and bring buyers to visit producers and advice on quality needed;
- Specialised program to support MSMEs with capacity building, access to services and information (markets, adaptable technology solutions and finance at low interest).

#### Packers:

- Improve on quality of packages and labelling to disseminate favourable information on tea, meet international requirements and remove queries;
- Value addition of black CTC tea and reduce bulk selling in the auction, offer teas in small pack sizes to supermarkets in destination markets;
- Contract packaging and joint ventures in packaging of tea at the destination countries; Participation in international trade fairs, exhibitions and conferences to promote tea and tea products;
- Direct buying from processing factories to narrow value chain and increase returns and price to producers and Implementation of quality improvement practices, quality and food safety management systems and VSC programs to ensure quality assurance, compliance and publicity-

#### MSMEs:

- Affordable financing packages;
- Exposure and networking forums;
- Support in business planning, pricing mechanism, promotion to increase awareness and consumption locally and abroad;
- Access to machinery and technology solutions at affordable prices and friendly financing options;
- Merging packaging operations and marketing promotions to enjoy economies of scale and improve on returns;
- Capacity building in marketing and product development;
- Establishment of a common user facility that can be used by SMEs, instead of each buying their own small inefficient machinery;
- Develop profile of MSMEs (on turnover, years of operation, number of employees, management/governance, ownership), register and support package to reach markets.

#### Purple and Specialty Packers/Exporters:

- Promotion of health benefits of purple tea such as high content of anthocyanin for fighting free radicals in the body;
- Further research to demonstrate and publish the health benefits;
- Expansion of knowledge and establish standard, nomenclature, good manufacturing standards, guidance (code of practice) and certification for speciality tea products;
- Studies of market needs for high value markets such as Japan, Russia, United States of America (USA) and EU and develop products that meet those needs;
- Affirmative government support to establish standards, get machinery and inputs and help to penetrate markets;
- Lobby buyers to pay MSMEs upfront or open Letters of Credit;
- Improve infrastructure at trade level for efficient services and Installation of machinery to the factory at TRI, Kericho for speciality tea products development, testing and refining.

#### **Opportunities for MARKUP:**

The Market Access Upgrade Programme (MARKUP) can collaborate with regional, country and regional trade support institutions in

- Assist in funding and support in adoption of the opportunities at the regional, national and industry levels;
- Capacity building of staff of the regional, national and industry business support organisations (Trade, Investment and Support Institutions (TISIs)) on their key roles and in marketing and access to finance;
- Build capacity of the regional, national and industry TISIs to develop and offer specialized programs and packages for MSMEs;
- Capacity building of regional, national and industry TISIs on International Trade Centre (ITC) online market tools - Sustainability Map, Trade Map, Market Access Map, Investment Map and Procurement Map;
- Promotion of tea in the international tea markets through sponsorship to trade fairs, exhibitions, conferences, foreign missions, visits, making strategies for penetration to new markets and market intelligence;
- Promotion of purple and specialty tea in the international markets through trade fairs and exhibitions;
- Support to rationalize trade regulations within the region and in the destination markets and removal of restrictions, trade and non-trade barriers and reduce delays at borders;
- Support in setting standards, nomenclature and procedures for manufacture and advancing research on specialty teas at the processing level;
- Support to establish an European Union (EU) based tea logistics hub, whereby full containers could be shipped and the tea stored for sale within the EU market;
- Facilitate to get the technical capability required to set up a tea extract plant locally, or in a joint venture

Moreover, specific opportunities for MARKUP to be directly implemented with MSMEs include:

- Capacity building in business planning, marketing, market penetration, product development, quality management, access to finance, financial management and quality control;
- Capacity building in standards, nomenclature and procedures for manufacture of specialty teas;
- Creating linkages and networking to financial providers, technology & machinery supplies and markets;
- Organise benchmarking visits for MSMEs and speciality tea marketing staff to tea producing and consuming countries;
- Support in promotional tours and display booths to trade fairs, exhibitions and conferences in market countries;
- Support with getting and managing shelve spaces with major brands and supermarkets in market countries;
- Provide market intelligence and capacity building on ITC online market tools such as Sustainability Map, Trade Map, market Access Map, Investment Map and Procurement Map.

From the analysis of the resource efficiency in tea factories, it was elucidated that factories operating under managing agency of organisations such as multinational companies, Kenya Tea Development Agency (KTDA) Ltd and OTB have established benchmark indices for utilisation of processing inputs while factories operating independently had no benchmarks and most of them compare year on year utilisation efficiency. Factories with established benchmarks have implemented interventions to improve on utilisation efficiency of inputs and put efforts to meet the benchmarks, especially for energy, which contributes highest cost item in the cost of production. A few independent factories have also implemented interventions. The resource efficiency analysis, demonstrated the need for benchmarking of the utilisation efficiency indices and interventions to improve on utilisation, especially for independent and SME factories.

#### Recommendations for the EA Tea Industry

#### At the **regional level:**

- Build the internal capacity of the regional TISIs so that they can enhance on service delivery to the tea industry, with more emphasis on the MSME members on topics such as green leaf sourcing, quality and food safety management in processing, tea blending, tasting and evaluation, financial access and marketing;
- Build capacity and establish a pool of external service providers (consultants) in the themes above for giving service to the industry;
- Professionalise the training in knowledge and skill development on the core functions of the tea industry: production, processing, quality assurance, tea tasting, tea blending and marketing through upgrading modular curriculum (basic/ordinary, advanced and master levels);
- Develop a regional training centre with courses on the core functions, offering both onsite and online programs, which can be in partnership with one or several universities;
- Establish bonded warehouses in other ocean ports such as Dar Es Salaam, Beira and Maputo and in dry ports such as Nairobi and Naivasha for storage of teas before auction and shipping for export;
- Promotion of teas regionally, by regional TISIs (EATTA and affiliated associations) by buying space in international trade fairs;
- Define nomenclature and standards of purple & specialty teas and with increasing volumes start auction of the teas;
- Set up an Incubation Center to promote processing of purple and specialty tea;
- Undertake studies to support the health benefits of tea and use information to promote tea.

#### At the country level:

- Build the internal capacity of the country TISIs (regulators, research institutions, members associations and others), so that they can enhance on service delivery to the tea industry, with more emphasis on the MSME members, on the core functions;
- Organising green leaf producers, especially smallholder farmers to achieve high productivity, quality and efficiency;
- Registration of individual country marks and vigorous promotion globally especially in new markets and lobby governments to fund and support initiatives from the sector.

#### MSMEs:

 Consider joint operations in sourcing of tea, blending, packing and marketing to enjoy lower costs due to economies of scale and acquire capacity of staff in the core functions of the industry.

#### Recommendations for MARKUP

#### At the **regional level**:

- Support the regional, national and industry TISIs to disseminate the findings of this sector analysis to the regional, national and industry trade stakeholders (TISIs), identify recommendations to implement and develop an implementation matrix;
- Capacity building of the regional TISI on capability to offer quality services to members and deliver on their mandates in quality management, financial access and trade facilitation;
- Support EATTA to build capacity for internal and associate service providers (consultants) on the industry core courses such as quality and food safety management, tea blending, tasting and evaluation, financial Access, tea trade (marketing & export), packaging and branding for EATTA to extend support, advisory and audit services to the members (TISIs & MSMEs);
- Support EATTA to develop curriculum & training materials, offer training, administer examinations, and establish a stepwise upgrading & accreditation program for quality service providers;
- Facilitate EATTA to develop a training centre and hub for quality service providers and her membership targeting industry core courses;

- Support EATTA to develop, update and maintain online one-stop shop for trade/export information (portal) with material on export procedures and product and trade requirements of destination markets and/or link to a regional portal for other commodities;
- Support EATTA on disseminating information to the tea stakeholders and training them on the utilisation of the online export resource (portal);
- Facilitate study of the market needs for high value and speciality teas in potential markets such as in EU countries, USA, Canada, Japan, Russia and other upcoming markets such as Poland and Brazil.

#### Country TISIs:

- **Burundi**: support to establish tea testing services on quality, chemical composition, safety and phytosanitary requirements such as MRLs,
- Kenya: support in setting standards, nomenclature and procedures for manufacture and advancing research on specialty teas at the processing level; support industry to formulate and register Geographical Indicator (GI) for tea,
- Tanzania: support packers to develop capacity for tea export; support in setting standards, nomenclature and procedures for manufacture and advancing research on specialty teas at the processing level and support industry to formulate and register Geographical Indicator (GI) for tea.

#### MSMEs:

- Capacity building of relevant MSME staff on sourcing and management of raw materials (green tea leaves);
- Good quality processing practices, including quality control, plant & personnel hygiene, waste reduction & management, machinery maintenance, food safety management and certification, tea blending, tasting and evaluation, voluntary certification standards, financial access, tea trade, climate change adaptation and mitigation, efficient utilisation of resources (inputs) and other relevant courses;
- Facilitation of MSMEs on implementation and compliance with, good manufacturing and management standards, food safety standards (HACCP, ISO 22000, FSCC 22000), voluntary certification standards, climate change adaptation strategies and resource efficiency strategies;
- Support MSMEs in business development, quality management and export strategies through training, coaching and publication of manuals;
- Support MSMEs in market access through promotional tours, participation and display of products in trade fairs, exhibitions and conferences and with getting and managing shelf spaces with major brands and supermarkets in market countries;
- Support MSMEs to get financial access by facilitating and working with financial institutions to structure suitable financing products.

## CHAPTER 1: INTRODUCTION AND BACKGROUND

### **1.1 Project Overview**

The Market Access Upgrade Programme (MARKUP) is a regional initiative focusing on increasing the participation of small and medium-size enterprises (SMEs) based in the East Africa Community (EAC) in intra-regional trade1 and the European market.

The MARKUP overall project document was designed based on extensive consultations between the EU Delegation in Dar es Salaam in charge of Regional Integration issues, the EAC Secretariat in Arusha and the Government officials of the five Member States, with technical support from the International Trade Centre (ITC). During the Project Design Workshop organised by the EU in Dar es Salaam on 14-15 March 2016, relevant partners and stakeholders agreed to focus the project on market access related interventions, including quality/SPS and value addition, as well as trade facilitation for selected value chains. Based on the recommendations and findings, the EU mandated ITC to lead the design of a comprehensive trade promotion project for the EAC region.

Given the current partnership with the EAC and its extensive expertise in supporting private sector development and market access for SMEs, the EAC and the EU mandated ITC to lead the implementation of three results of the EAC Window and one result of the Tanzania Window.

The German International Cooperation Agency (GIZ) has been selected as another implementing partner organisation of the Result 2 of the MARKUP project related to Project Coordination, and Standardisation, Quality Assurance, Metrology and Testing (SQMT) harmonization.

The MARKUP project aims to contribute to the economic development of the EAC region. The specific objective is to improve market access to the EU and the East African region for five EAC partner countries (Burundi, Kenya, Rwanda, Tanzania and Uganda) agro-industrial crop and horticultural sectors – avocado, cocoa, coffee, spices and tea. All EAC partner countries selected coffee as a sector for intervention under the programme, while tea was selected by Kenya, Tanzania and Burundi, cocoa selected by Uganda, Spices by Tanzania.

## **1.2 Purpose of Tea Industry Supply Analysis**

The Export Potential Assessment conducted by ITC revealed that coffee, tea, spices and avocado have proven to be internationally competitive, and offer good prospects of export success in the EAC and EU markets. Whilst much development effort focused on farmers and production over the last few years, little attention has been given to the market-facing elements of the value chains. This includes increasing offer that conforms to export and inter-regional trade requirements so that domestic price volatility is reduced during seasonal harvest and achieving higher value addition and competitiveness with imports. Financing is a core part of any business seeking to expand or improve production and meet buyers' requirements.

To enhance their competitiveness and plug into a value chain, SMEs require both market knowhow and access to adequate resources. Once they join, their priorities shift to managerial and operational capacities. Successful SMEs design their upgrades to higher-value tiers of the chain, proactively seeking market opportunities. Any firm-level effort in this direction is more likely to succeed if supported by national and regional systems

The duties and responsibilities for this assignment fall under *R* 3. Export Competitiveness enhanced for sector SMEs and specifically the activity 3.1 Improving awareness of market requirements. Under this activity is the sub-activity 3.1.2 Conduct value chain supply/ demand analyses described as "Conduct a regional market-led assessment with tea trade associations to define and validate a sector action plan focused on value addition and export development". The intention of this supply and demand analysis for the tea sectors of Kenya, Tanzania and Burundi to provide informed analysis to a sector action plan that can serve various purposes; primarily it will be used to guide the subsequent MARKUP project activities in the result areas listed in the work plan but also for use by the regional and national regulatory and industry representative bodies in support of their own tea sector strategy implementation and industry development support.

The duties and responsibilities for a **tea industry supply analysis** will be in complement to a separate tea industry demand analysis and will be delivered in coordination and cooperation of ITC project management.

The tea industry supply analysis will also add to the depth of knowledge covered by the Kenyan tea industry value analysis undertaken by EATTA<sup>5</sup> and ITC<sup>6</sup>. It is further expected to contribute to implementation for the Taskforce report of the Kenya tea industry of 2016<sup>7</sup>.

## **1.3 Technical Approach and Methodology**

The technical evaluation for the tea business unit was conducted in five stages as follows;

- Inception and desk review;
- Value chain mapping;
- Data collection and analysis;
- Analysis of challenges and opportunities;
- Benchmarking of factory performance;
- Reporting.



#### 1.3.1 Desk Review

The aim of the desk review was to generate a contextual understanding of the existing publications on the tea trade business in relation to market access, value addition and export development. A thorough and systematic review and analysis of existing documentation was undertaken including annual reports, studies and other reports done on the elements of the assessment.

#### 1.3.2 Value Chain Mapping

Value chain mapping is the process of developing a visual depiction of the basic structure of the different actors in the value chain and their relationships. A value chain map or framework illustrates the way the product flows from raw material to end markets and presents how the industry functions. Value chain maps assist in developing and understanding of the current situation of the industry and the relationship with interlocking elements. The mapping exercise provides an opportunity to reveal gaps, bottlenecks and opportunities to be addressed in the supply chain.

#### 1.3.3 Data Collection and Analysis

This step involved collection of data through primary and secondary sources by way of data collection tools and key informant interviews with various value chain actors including regulators, research institutions, producers, processors, traders (warehouse, brokers & buyers), managing agents, producer and trade associations, among others. The qualitative data gathered by these methods shedding a light on the current situation in terms of production, production capacity and processing, tea types and grades, quality, value-addition and market performance. The data

<sup>&</sup>lt;sup>5</sup> East Africa Tea Trade Association (EATTA); A Study of the Tea Value Chain in Kenya; 2018.

<sup>&</sup>lt;sup>6</sup> Building a Climate Change Resilient Tea and Coffee Value Chains in Kenya; International Trade Centre (ITC), 2018.

<sup>&</sup>lt;sup>7</sup> Taskforce Report on the Tea industry, Ministry of Agriculture, Livestock and Fisheries; 2016.

analysis elucidated the dynamic factors of the value chain such as trends, preferences, practices, benchmarking and relationships. To complement this, quantitative analysis of the chain was undertaken to provide a picture of the personal perceptions of the representatives in the value chain.

**Sampling:** since the assessment was conducted at the trade level of the value chain and due to limitation of time and resources, data was collected from Business Support Organisations (BSOs) only, except for the resource efficiency benchmarking which was also taken from sampled tea factories.

**Quantitative data:** quantitative data was requested from the BSOs using the format in Appendix 1 in order to enable the organisations to present the data in their own formats. The data was compiled in excel worksheets

**Qualitative data:** qualitative data was collected through key informant interviews guided by questionnaire in Appendix 2 and discussions guides, tailored to collect all the required information.

**Data Analysis:** quantitative data was analysed using excel data analysis tools and presented in tables and graphs. Qualitative data was analysed through descriptive statistics and presented in tables and charts.

#### 1.3.4 Analysis of Challenges and Opportunities

The factors affecting performance of the chain were collected through the key informant interviews as guided by the questionnaire and formulated on the basis of the value chain framework in order to identify systemic chain-level issues. The information gathered was further analyzed to characterize opportunities and constraints to the competitiveness of the value chain.

#### 1.3.5 Benchmarking Of Factory Performance

Data for establishing the efficiency of resources utilisation was collected from sampled factories in each country using the tool in Appendix 3. The tool was used to analyse the data and results presented in efficiency indices. Resources included; energy (electricity, firewood and fuels for factory generators and transportation of raw materials from the field to the factory), water and waste generation to depict efficiency of utilisation of raw materials, green tea leaves. Monthly data for 2018 was collected and used to benchmark performance indices.

#### 1.3.6 Limitations

- A number of challenges were encountered during the data collection and assessment as follows;
- There were few documented literatures on the tea industry in the region and almost none for Burundi and Tanzania. Even the websites of the main trade institutions had scanty information. The consultant had to use his knowledge, experience and contacts on the industry to map the sector;
- Challenge of getting information from stakeholders in Burundi and Tanzania on the post processing trade activities of the value chain as these activities take place near the tea auction in Mombasa, Kenya;
- Difficulties in getting representative sample of the processing factories for resource efficiency data collection due to:
  - The presence of only two producers in Burundi;
  - The wide spread of the processing factories in the large country and similarity in ownership of the factories in Tanzania;
  - The large number of factories and the small sample size in Kenya.
- Difficulties to communicate due to language problem with some staff members in Burundi factories who are not very conversant in either English or Swahili. This was resolved thanks to a staff from the head office OTB who acted as a translator;

- Not possible to get the resource efficiency data from the processing factories during the visits as it took long to compile and long delays before the data was sent via emails after the visits; in some cases, the data was never sent, despite frequent promises. Some factories had strict confidentiality conditions, making it almost impossible to use the data, even though they were welcoming to the envisaged benchmarks;
- Limitation in funding and hence time allocation, meant that data was collected for five years, which did not show clear trends in statistics.

## CHAPTER 2: OVERVIEW OF THE TEA SECTOR IN EAC

### 2.1 General Overview of Global Tea Value Chain

World tea production increased by 4.4% annually over the last decade to reach 5.73 million tonnes in 2016.<sup>8</sup> Production is dominated by China (42.6% of output) whose production more than doubled from 1.17 million tonnes in 2007 to 2.44 million tonnes in 2016, and South Asia (40%), notably India and Sri Lanka. Africa accounts for around 15 - 20% of global production, dominated by Kenya (13%). Global production of black tea is forecasted to rise by 2.2% on an annual basis over the next decade to reach 4.4 million tonnes in 2027 while output of green tea is foreseen to increase at an even faster rate of 7.5% annually to reach 3.6 million tonnes in 2027, largely driven by China. Kenya, the largest black tea exporter in the world, together with China and India are projected to witness major output increases, becoming paramount contributors to world supply of black tea. Production in Kenya increased by 18% in 2016, reason for larger shipments from the country with exports reaching a record level of 473 million tonnes in 2016, a 16% increase from 2015, as well as a strong annual growth of 3.4% in green tea exports.

World tea consumption has increased annually by 4.5% to reach 5.5 million tonnes over the decade to 2016<sup>1</sup>. In most of tea producing countries such as Asia, Africa and Latin America, growth in demand expanded significantly. Consumption in China expanded at an annual rate of 10.1% reaching 2.1 million tonnes in 2016, while India, with consumption at 1.05 million tonnes, had the second largest tea consuming population in the year, accounting for 19% of the global total. Traditional importing countries in Europe (except Germany) and the Russian Federation have recorded a decline in consumption given the fact that European tea market is mature and per capita consumption has been declining due to competition from other beverages, particularly bottled water and carbonated drinks. For the Russian Federation, the decline in oil prices has negatively impacted on the country's tea imports. Health is one of the factors influencing tea consumption rise as consumers become aware of the health benefits of tea, the beverage's anti-inflammatory, antioxidant and weight loss effects, factors said to be key drivers of future consumption growth.

## 2.2 Regional Value Chain

The East Africa region is the third largest tea producer in the world accounting for 20 – 23% of the total production.<sup>1</sup> Kenya dominates production with an output of over 490,000 MT in 2018, which is two-thirds of the African output. Uganda and Malawi are the next largest producers, with outputs of around 50,000 - 55,000 MT, followed by Tanzania to make among the top ten of the highest tea producers in the world. Other producers in the region operate on a smaller scale (15,000 - 30,000 MT). Small amounts of tea are produced in West Africa, in Cameroon (less than 10,000 MT per year), while Egypt, Morocco and Ethiopia export small volumes from imports. Kenya has long dominated Africa's tea sector, with consistently high levels of production. Output has doubled over the past 20 years, from 221,000 MT in 1997 to 440,000 MT in 2017. However, production has varied from year to year and can fall by 20% due to poor weather conditions. Growth of production has been constrained by land pressures, and the area under cultivation has been stable over the past decade – production rise has largely been due to higher productivity from new clones.

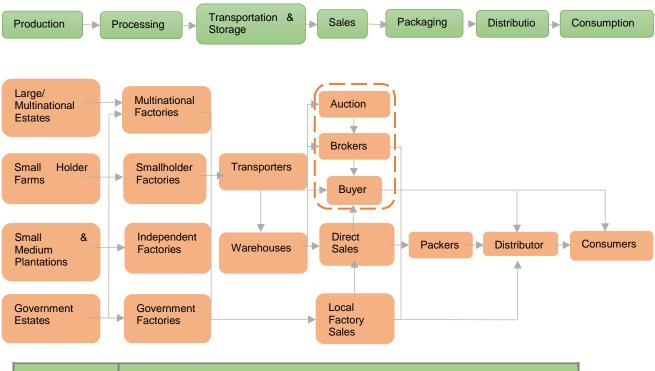
Tea production and processing in EAC is organised under numerous different models, but at least four general models have been observed, namely:

A. Government owned production estates and processing factories: found in five factories in Burundi under management of OTB and two factories in Kenya, under control of Nyayo Tea Zones Development Corporation (NTZDC), a forest conservation organisation,

<sup>&</sup>lt;sup>8</sup> Global Tea Production and Consumption Rises, According to FAO; <u>Food Business Africa</u>, <u>June 14, 2018</u>

- B. Wholly smallholder owned farms and factories: found in Kenya under the management of Kenya Tea Development Agency (KTDA) Limited,
- C. Mixture of smallholder and/or private owned plantations and factories: found in one factory in Burundi and a number of factories in Kenya and Tanzania,
- D. Wholly private owned plantations and factories: mainly owned by multinational companies; found in Kenya and Tanzania.

Figure 1 Impression of the Regional Value Chain



Policy	Ministries Responsible for Agriculture
Regulatory	Office of Tea Burundi, Tea Directorate (Kenya) & Tea Board of Tanzania
Research	Tea Research Institute (Kenya) & Tea Research Institute of Tanzania
Representation	East African Tea Traders Association (EATTA), Producer and Trade Associations
Others	Development Partners (NGOs), VSCs, Certifying Bodies, Auditors & Consultants

Source: Consultant's elaboration

The main market outlet for EA is the Mombasa Auction with 95% of smallholder output sold through 12 registered Tea Brokers. For estates 40% is sold at the auction while 60% is exported directly to buyers overseas or parent companies like Unilever to Lipton Park and Finlays Kenya to Finlays UK. The major global tea buying companies have agents or representatives in Mombasa such as Lipton, Global Tea Commodities, Tetley Tea, Finlay's and Van Rees.

## 2.3 Countries Value Chains

#### 2.3.1 Kenya

Kenya is the third largest tea producer in the world and the leading producer in Africa. Tea production in 2017 has been reported to be 440 million kgs of made tea, which was a drop of 7% from 473 million kgs reported in the previous year. 56 - 60% of total production is from smallholder growers and the rest 40 - 44% is from estates and independent growers. There are over 700,000 tea growers of which 632,000 are smallholder out growers organised in 70 tea factory companies managed by the KTDA Limited and 70,000 are independent out growers supplying green leaf to estate factories. The majority of the estates are owned by multinational companies such as Unilever Group, Finlay's Tea, Eastern Produce Kenya, Williamson Tea Kenya and local investors. The total cultivated land is 203,000 Ha of which 126,000 Ha is under smallholder farmers; average tea holding is 0.4 acres (1000 tea bushes) and the rest 74,000 Ha under plantations. There is little expansion of land on tea planting, though production is increasing due to improvement in yield and replacement of old tea bushes with high yielding clones, especially in plantation estates. There is no use of chemicals, as climate on these areas is conducive to tea growing and not favourable to pests and diseases prevalence. The quality of tea is high and hence most tea is used for blending.

There are four models of smallholder farmers' relationship with processing factories:

- KTDA managed factories 70 factories: which are owned 100% by farmers through shareholding and they are managed by KTDA Ltd under management agency agreement. Farmers are paid for green leaf delivered as well as from profits of the factory;
- 2. **Independent factories** 28 factories: farmers may own or not own shares in the factory; they are paid for green leaf delivered, and those with ownership get dividend;
- 3. **Multinational factories** 24 factories: farmers have no shareholding, they deliver their green leaf for processing and are paid for quantities delivered;
- Government- owned factories (NTZDC) two factories: set up for processing government owned green leaf from conservation fields between the natural forests and farmers' land, but also accepts green leaf from nearby farmers; farmers paid for green delivered.

All models have similar payment systems; first payment or monthly payment for green leaf delivered during that month and second or annual payment, referred to as "Bonus", based on financial performance of the factory in the year. For KTDA managed factories, all annual surpluses are paid to farmers, pro rata to the quantity of green leaf delivered, while for other factories, a proportion for payment is decided by the owners. While KTDA factories pay about 30% in first payment and 70% in second payment; others do the opposite 70% in first payment and 30% in second payment. The total annual payment rate is always higher for KTDA factories than for others.

#### 2.3.2 Tanzania

Tanzania is the fourth highest producer of tea in Africa, after Kenya, Uganda and Malawi. Tea is an important export crop for Tanzania. There is a total of 22 processing factories, two are wholly owned by smallholders, while in other four factories smallholder farmers have minority shareholding (25 - 30%), the rest are owned by private companies, but most have smallholder outgrower schemes. Made tea production during the financial year 2014/2015 was 36,000 Tons kgs, which was higher by 8% as compared to 34,000 tons kgs recorded during the season in the

year 2013/14<sup>9</sup>. Estate farmers produced 25,000 tons kgs in 2014/2015 as compared to 23,000 tons kgs produced in 2013/2014 an increase of 7%, while smallholder farmers produced 12,000 tons kgs in 2014/2015 as compared to 11,000 tons kgs produced in 2013/2014 an of 11%. The total planted area by smallholder farmers is 50% of the total planted area, yet their total production accounts for only 30% of the national output. This demonstrates the low yield from the smallholders compared to that of the estates (and smallholders in Kenya).

#### 2.3.3 Burundi

Export tea volumes from Burundi were reported at 10,495 tonnes in 2015 rising by 6.6% from the previous year.<sup>10</sup> There are five tea processing factories, all owned by the government and one private factory operating and another one under construction. Tea is a major export produce and foreign exchange earner for the country; It contributes to about 15% of the Gross Domestic Product (GDP) and is the second biggest foreign exchange earner for the country after coffee.

 <sup>&</sup>lt;sup>9</sup> FAO Intergovernmental Group On Tea: Report of The Tea Industry in Tanzania, Naivasha, Kenya, 25-27 May 2016
 <sup>10</sup> <u>https://af.reuters.com/article/idAFKCN0VQ1D6</u>

## CHAPTER 3: VALUE CHAIN ANALYSIS FINDINGS

### **3.1 Production and Processing**

In the EAC region, tea production and processing is organised under numerous different models, but at least four general models have been observed, namely;

- 1. Government owned production estates and processing factories;
- 2. Wholly smallholder owned farms and factories;
- 3. Mixture of smallholder and private owned plantations and factories;
- 4. Wholly private owned plantations and factories.

The first model is the main production and processing system in Burundi, where the government through Office du' The' du Burundi (OTB) (Office of Tea Burundi), owns five out of the six currently existing factories. The government also owns most of the estate where the tea is produced, but some of the factories take in green tea leaves from smallholder out grower farmers. OTB manages green leaf production in the government estates, plucked green leaf collection logistics for both estates and out growers, delivery to the processing factories, processing in the factories, logistics of transportation of made tea to the market, marketing of made tea through various outlets and administration of the sales proceeds, including payment to out grower farmers for green leaf delivered. The model is also replicated in Kenya, with two tea-processing factories owned by government through the NTZDC, a government parastatal. The corporation has the mandate of developing a strip of tea bushes at the boundaries of natural forests and settlements to prevent encroachment of forests by neighbouring farmers. The two factories also process green leaf from smallholder farmers within the catchment. There are currently no government owned processing factories in Tanzania.

The second model of smallholder owned farms and factories is predominant in Kenya, where smallholder farmers currently own 70 tea processing factories, which are managed by KTDA Ltd on behalf of the farmers. Farmers cultivate their own small parcels of land and manage their tea farms, including plucking of green leaf and delivery to leaf collection centres. The factories organise green leaf collection logistics and delivery to the factory for processing, as well as transportation of made tea to the market. KTDA manages the marketing of tea through various market outlets and the administration of sales proceeds and payment of farmers through the factories. There are no similar factory models in Burundi and Tanzania.

The third model of blended shareholding between smallholder farmers and private investments is common in all the EAC countries and is the predominant system in Tanzania. Private investors, who may have tea estates or not, put up or buy a factory and may invite smallholder out growers for minority shareholding. While farmers take care of the management of their farms, including plucking and delivering of green leaf to collection points, the factories organise green leaf collection logistics and delivery to the factory for processing. The factories also organise the tea processing in the factory, logistics of transportation of made tea to markets, marketing of tea through various channels and administration of sales proceeds for payment of farmers for green leaf delivered. For some factories, the private investors have a big supply of raw material source and supply the highest proportion to the factory intake. For other, the sources of supply are almost at par and while for others, the out growers supply the highest proportion of the green leaf intake, in some cases as high as 100%.

The fourth model includes big multinational companies, with large plantations supplying more than one factory and it is common especially in Kenya and Tanzania. Some of the factories only process green leaf from their own estates, while others also accept green leaf from other privately or publicly owned small and medium estates and from smallholder farmers. In this category there are also emerging local investors who put up or buy tea processing factories, mainly referred to as "independent factories" in Kenya, with little green leaf own sourcing and hence mainly buy green leaf for processing from smallholder farmers. Under this model, the private company is responsible for all activities in the value chain apart from plucking green leaves and delivery to the collection points which is the responsibility of the smallholder farmers.

The type of tea bushes grown in the region are of the variety *Camellia Sinensis* variety *Assamica*, which originated from India. It is predominant due to its high yield potential. Tea is grown on tropical red loam soils, mixed with volcanic soils found in high altitude areas. The suitable altitude range is between 4,500 ft. (1,500 M) and 6,750 ft. (2,250 M) above sea level. The bush does well

in an environment with well-distributed rainfall ranging from 1,200 mm to 2,500 mm annually with long sunny intervals. Suitable temperature for tea growth ranges from minimum 12 °C to a maximum 28°C. Soil type and condition is very important factor to tea growth, therefore, the soils must be well drained with 2 M depth. The PH range of between 4.5 and 6.5 is suitable, beyond which, the tea's growth is retarded.

The findings of the various players in production and processing of tea are presented under the different countries here below.

#### 3.1.1 Kenya

#### 3.1.1.1 Tea regulation

Tea is one of the scheduled crops recognized under the Crops Act 2013. The Act regulates the development of scheduled crops; declaration and promotion of scheduled crops; commodities funding; incentives to growers and identification of agricultural land, and registration and licensing (Regulation of scheduled crops and Registration of dealers). The tea sub - sector is directly regulated through the mechanism of the Tea Regulations 2011, which are currently under review.

The main governmental institution responsible for the management of the tea sub sector is the **Tea Directorate (TD)**. TD was created following the repeal of the Tea Amendment Act 2011 (and the disbandment of the former Tea Board of Kenya (TBK)), after the commencement of the Crops Act 2013 on 1st August 2014. Its mandate is to:

- License tea growers and tea manufacturing factories;
- Register buyers, brokers and packers;
- Manage agents and any other person dealing in tea; and
- Promote Kenyan tea in local and international markets.

Other government institutions that oversee the regulation of tea include the **Agriculture & Food Authority (AFA),** which was formed in 2016 from the Agriculture, Fisheries and Food Authority (AFFA) with shifting of Fisheries to the fisheries docket. AFFA came into existence following the enactment of the AFFA Act 2013 on 17th January 2014. It is an amalgamation of all the agricultural institutions that existed before the commencement of the AFFA Act and the Crops Act 2013. AFA through TD is responsible for Registration and Licensing of tea dealers, promotion of tea, as well as Technical and Advisory services,

The **Ministry of Agriculture Livestock, Fisheries and Irrigation** which is responsible for formulation, implementation and monitoring of agricultural legislations, regulations and policies, supporting agricultural research and promoting technology delivery, development, implementation and coordination of programmes in the agricultural sector, regulating and quality control of inputs, produce and products from the agricultural sector, management and control of pests and diseases and collecting, maintaining and managing information on agricultural sector. Institutions that have been delegated these responsibilities include AFA, Kenya Plant Health Inspectorate Service (KEPHIS), Kenya Agricultural and Livestock Research Organisations (KALRO), an amalgamation of all agricultural research institutions including Tea Research Institute (TRI).

The **Ministry of Industry, Trade and Cooperative Development**, responsible for trade policy, export promotion, trade negotiations and advisory services, and enforcement of international trade laws, regulations and agreements. Institutions that have been delegated these responsibilities include Kenya Bureau of Standards (KEBS), Export Promotion Council (EPC) among others.

The **Ministry of Finance** in charge of the collection and regulation of levies and duties, delegated to the Kenya Revenue Authority (KRA).

And the **Ministry of Foreign Affairs**, which oversees the foreign relations of Kenya through embassies and missions.

#### 3.1.1.2 Organisation of the tea industry

Apart from the regulatory organisations mentioned above, there are other key national institutions that play major roles in the tea sector in the country including:

**Nyayo Tea Zones Development Corporation (NTZDC)** is a state corporation that was established in 1986 with the goal of promoting forest conservation through the establishment of

buffer zones of tea and assorted tree species to protect forests against human encroachment. Through Legal Gazette Notice no. 265 of 1986, its mandate was defined as to establish, manage and develop tea and fuel wood plantations and indigenous trees; establish and manage nurseries for propagation of tea and tree seedlings; establish, manage and maintain tea processing factories and process tea. NTZDC also constructs and maintains rural access roads, offices and green leaf collection centres and is authorised to transport, lease, sell or market in Kenya and abroad any tea, wood or other products produced or processed by the corporation or its agents. It has its own processing factory, the Kipchabo Tea Factory in Nandi County; a second factory is under construction, the Gatitu Tea Factory which will be based in Kirinyaga County.

**Tea Research Institute (TRI),** formerly known as the Tea Research Foundation of Kenya (TRFK), was established in 1980 with the mandate of promoting research and investigation into tea-related problems including its productivity (yield), quality and suitability of land in relation to tea planting, tea processing and other related matters. Following the enactment of the Kenya Agricultural and Research Act No. 17 on 25th August 2013, and the commencement of the Act on 1st July 2014, four institutions: Kenya Agricultural Research Institute (KARI), Tea Research Foundation Kenya (TRFK), Coffee Research Foundation (CRF) and Kenya Sugar Research Foundation (KESREF) were effectively dissolved and merged to form Kenya Agricultural & Livestock Organisation (KALRO). The mandate of these entities, however, remain unchanged.

**Kenya Tea Development Agency (KTDA) Limited** was formed in 1963, after split of the then Special Crops Development Authority (SCDA) in to bodies representing different commodities. KTDA was a government parastatal charged with the responsibility of promoting the development of tea growth, processing and marketing by smallholder farmers. In the year 2000, it was privatized and changed the name to KTDA Limited. Today, it is a private company owned by over 560,000 smallholder tea farmers through their shares in 54 tea companies that own 70 tea factories. KTDA Ltd is a tea marketing agency that provides critical services in the management, processing and marketing of smallholder teas. Specifically, its responsibilities include: providing inputs and distribution to farmers on credit; capacity building and extension services to farmers, green leaf collection logistics, processing of green leaf in to made tea, transportation of made tea to market and associated logistical support, marketing and administration of the tea proceeds and payment of farmers.

It is the world's largest single producer of black CTC tea by virtue of the total output of the smallholder farmers under its control. The individual tea companies are separate legal entities with their boards of directors who are elected by the farmers to oversee the operations of the tea factories. KTDA Ltd is represented in the factory boards through management staff seconded to the factories by KTDA Management Services, a subsidiary of KTDA Holdings. The directors of tea companies form the general assembly of KTDA Holdings Limited and elect the board from among themselves. KTDA Management Services strives to ensure that the factories are managed in a financially prudent manner in order to secure the farmers' earnings. The greatest advantage of this structure is that it affords KTDA economies of scale that enable it to negotiate for competitively priced credit facilities and source for inputs and investments. Other subsidiaries for KTDA Holdings Ltd are: Green Feather that offers insurance to farmers, Majani Insurance Brokers that offers warehousing services in Mombasa and buys tea in the auction for re-selling, Kenya Power Company Limited, that develops hydro power stations, and TEMACO responsible for development of tea machinery.

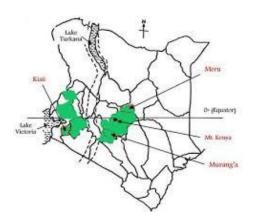
The **Kenya Tea Growers Association (KTGA)** was formed by large-scale tea producers in 1931 to promote their common interests in the cultivation and manufacture of tea and to promote good industrial relations and sound wage policies for the workers. KTGA endeavours to promote industry leadership and foster profitable growth in harmony with good corporate citizenship and a sustainable approach to business. It has expanded its roles from the founding responsibility of industrial relations to include: lobbying and advocacy on legal and policy issues that affect the industry, with national government, government bodies and county governments, representation of the industry in other synergy bodies such as Federation of Kenya Employers (FKE), Kenya Private Sector Association (KEPSA), Kenya Association of Manufacturers (KAM) among others, general advisory services to members on common issues that affect their business, coordination of joint infrastructure projects such as Tea Roads and managing collective Corporate Social Responsibility (CSR) projects such as running secondary schools.

Membership to the association is open to growers who maintain over 5 hectares of tea and tea processors. Its membership is drawn from public and private Tea Companies in Kenya mainly the tea plantations found in Kericho, Bomet, Nyamira, Nandi and Kiambu counties. There are currently 21 registered members with a total of 34 estates and 19 tea processing factories (for a full list of the members please see the appendix).

#### 3.1.1.3 Tea production

Tea is grown in the highland areas and the major tea producing areas are in the East of Rift Valley: Aberdare Ranges, Mt. Kenya region and Nyambene Hills, and in the Rift Valley and West of Rift Valley: Mau Escarpment, Kericho and Kisii Highlands, Nandi Hills, Western Highlands and on the slopes of Mt Elgon. There are 18 counties where tea is grown; Bomet, Bungoma, Embu, Kakamega, Kericho, Kiambu, Kirinyaga, Kisii, Meru, Murang'a, Nakuru, Nandi, Nyamira, Nyeri, Tharaka Nithi, Trans Nzoia, Uasin Gishu and Vihiga. See map in Figure 2 below.

Figure 2 Tea Growing Areas of Kenya



Tea is produced by two types of producers; smallholder farmers with small size land holding at average 0.2 Ha per household and large plantations with hundreds to thousands of hectares. Smallholder producers are mainly Kenya citizens whose total crops account for 56 - 60% of the national production and are mainly organised and managed through KTDA Ltd. The plantation sector is mainly private and foreign owned and accounts for the rest 40 - 44% of the national production. The land under tea cultivation and production between the two levels is show in Table 1 below.

Table 1Kenya's National Production from 2013-2018

	Estate		Smallholders		Total (Estates & Smallholders)		Smallholders	
Year	Planted Land (Ha)	Production (Kgs)	Planted Land (Ha)	Production (Kgs)	Planted Land (Ha)	Production (Kgs)	Planted Land (Ha)	Production (Kgs)
2013	71,305	182,617,585	127,352	249,835,115	198,657	432,452,700	64.1	57.8
2014	74,385	182,686,124	128,621	262,418,610	203,006	445,104,734	63.4	59.0
2015	75,239	161,615,069	134,187	237,596,298	209,426	399,211,367	64.1	59.5
2016	89,796	207,402,004	138,382	265,609,320	228,178	473,011,324	60.6	56.2

2017	91,592	193,730,662	141,150	246,127,077	232,742	439,857,739	60.6	56.0
2018 ª	92,500	220,471,120	141,800	272,527,603	234,300	492,998,723	60.5	55.3
Source; AFA TD. NB; <sup>a</sup> 2018 planted area figures are provisional.								

NB; a 2018 planted area figures are provisional.

The major tea producers and their production are shown in Table 2 below.

S/no.	Producer organisation	Market share (%)
1	Kenya Tea Development Agency Ltd	55.96%
2	Unilever Tea Kenya Ltd	8.48%
3	Eastern Produce Kenya Ltd	6.59%
4	James Finlay (Kenya) Ltd	5.55%
5	Williamson Tea Kenya Ltd	4.63%
6	Sotik Tea Company Ltd	1.78%
7	Nandi Tea Estates Ltd	1.37%
8	Kipkebe Ltd	1.35%
9	Sotik Highlands Tea Estate	1.22%
10	Others (Private)	13.07%

Table 2 Kenya's Main Tea Producer Organisations

Source: AFA TD

For the full list of producer organisations please see Appendix 5.

#### 3.1.1.4 Tea processing

Tea producers are linked to processing factories through one of the following arrangements;

- a) Smallholder owned factories 70 factories, which are owned 100% by farmers through shareholding and they are managed by KTDA Ltd under management agency agreement;
- b) Privately owned (independent) factories 28 factories; mainly owned by local investors who may give some nominal shares to farmers delivering green leaf for processing;
- c) Multinational owned factories 24 factories, which are mainly owned by non -Kenyans; or
- d) Government owned factories (NTZDC) two factories.

Almost all the factories process black tea through the CTC method. They have high capacity, running from five million kgs of green leaf per year for one line to 30 million kgs green leaf for six lines. Most of the smallholder tea factories have three lines with capacity of 15 million kgs of green leaf, but process up to and some above 20 million kgs per year. Most of the independent factories start with one line with capacity of 5 million kgs and expand as the supply increases, with average being at two lines of 10 million kgs per year. Multinational factories have more than three processing lines, above 15 million kgs of green leaf per year. The technology in the factories is fairly well advanced, but manually operated, more modern and semi - automatic for newly constructed factories. Machinery for older factories are mainly from Europe, particularly the UK, (especially for generators, motors and other equipment) and Asia, particularly India and Sri Lanka. Newly constructed factories have machines from Asia, mainly India as well as from local

engineering manufactures (mainly for fabricated gadgets such withering troughs, conveyors, storage bins and for driers). Factories are manned by qualified and skilled staff, who are trained on general courses at the local universities and get tea specific skills on the job training. A local institution of higher learning, Karatina University, in Mt. Kenya region has started offering specific tea related courses at certificate, diploma and degree levels. Quality control is undertaken in the factories and reinforced through the managing agents, the brokers and the Tea Research Institute (TRI).

A number of tea processing factories have fitted a separate line for processing speciality tea such as CTC Purple, Orthodox (black, green & purple), oolong and white teas. The lines are currently under-utilised due to lack of market for the speciality teas. Other factories that had started producing speciality tea have stopped when the teas were not sold; some have reported that only few of the tea grades have a market, leaving factories with unsold stocks and making them uneconomical to produce. In 2016, the government through the AFA Tea Directorate (AFA TD), initiated a move to increase the value of tea through product diversification and value addition, with view of increasing the returns to the stakeholders. A study of the value chain was undertaken, initiated by AFA TD that recommend the establishment of cottage factories to process speciality teas. A number of cottage factories have also been constructed for processing speciality teas<sup>11</sup>. The speciality tea segment is at the nascent stage and is supported by the government through AFA TD under the auspices of The Purple & Speciality Tea Association (P&STA) of Kenya.

The P&STA was formed in March 2017 when the founder members met at Kericho Tea Research Institute to deliberate on issues touching on production, manufacture and marketing of purple and specialty teas. The members present felt that there were issues that affected them during production and marketing of high value Purple & Specialty teas that required them to come together and speak as one voice. The Association was subsequently registered and certified on 4th July 2017.

The membership is vetted by the committee (elected by members) to ensure that only companies actively involved in production, manufacture and marketing of specialty teas are admitted to the Association. The Member companies stood at 25 by December 2018.

The association is governed by its constitution. There is an intention to set up a Secretariat to manage day to day activities but due to financial constraints, there is no full-fledged secretariat yet. The association's Secretary manages the affairs of the association on voluntary basis and supported by administrative Assistant from the Tea Directorate.

Membership to the Association can be classified into four membership categories as follows:

- a) **Manufacturers/Cottage members**: person, firm or company, established in Kenya and with Registration Certificate from AFA TD for the purpose of receiving purple leaf, green leaf or organic tea leaf and processing high value purple and specialty teas for niche markets and not for mass market,
- b) **Producer member**: person, firm, company or association (representing growers), engaged in planting tea (including purple tea and organic tea) that is intended for supply to manufacturers/cottages processing high value Purple & Specialty Tea,
- c) Packer member: a person, firm or company, with a Packer Registration Certificate issued AFA TD and is actively engaged in buying pure Kenyan Purple & Specialty tea from the Association Manufacturers/Cottages with a mission for value addition and marketing to niche high end market segments locally/internationally,
- Associate member: person, firm or company not falling within Member Categories (a),
   (b) and (c) above and is supports business of the association admitted at the discretion of the association.

See Table 3 below for speciality tea production and Appendix 11 for members of the Specialty Tea Association.

<sup>&</sup>lt;sup>11</sup> Framework for Promoting Manufacture of High Value Specialty Teas; Final Report, June 2016, AFA TD

Table 3 Specialty Tea Production in Kenya in 2017

Type of Specialty Teas	Production (Kgs)
Black Orthodox	2,208,315
Black Ball Shape	109
Green Whole Leaf	653
Green Orthodox	55,679
Green CTC	0
Purple Orthodox	10,991
Purple CTC	565
Green Ball Shape	137
Total	2,276,449

#### 3.1.1.5 Tea marketing

There are three market outlets for tea from the factories:

- Local sales at the factory to local packers and final domestic consumers such as supermarkets, wholesale and retail shops, kiosks, hotels and households;
- Through the Mombasa auction for local packers, who sell both in the domestic and international markets and for direct export;
- Direct sales to international markets.

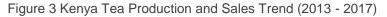
A large proportion of the tea is sold through the Mombasa Auction. Over 94% of the national tea produced is exported, with local consumption taking less than 6% of the total production.

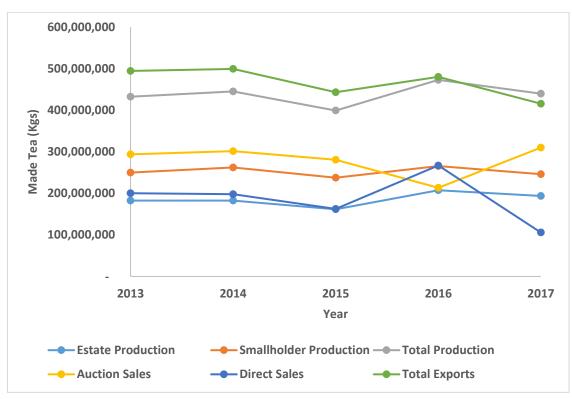
Find below the figures for tea sales through the various market outlets in Table 4 below.

Year	Auction Sales (Kgs)	Auction Price In USD/Kg	Export Volume (Kgs)	Average Price (KShs/Kg)	Export Value (KShs)	Local Consumption (Kgs)
2013	294,016,604	2.53	494,346,983	231.43	114,408,328,090	26,549,868
2014	301,406,396	2.16	499,379,622	202.48	101,116,588,984	32,179,851
2015	280,801,773	2.98	443,461,219	282.44	125,250,543,666	29,370,102
2016	213,301,917	2.36	480,330,230	251.28	120,695,558,063	29,751,875
2017	309,981,232	2.98	415,715,284	310.98	129,278,469,217	37,631,532

Table 4 Kenya Tea Sales Through Auction, Export and Local Consumption

Source: AFA TD





From the information in Figure 3 above, it can be observed that there has been no significant trend in production over the last five years. However, the variation in production over this short period between the highest and lowest is very high at 26%. Production form the smallholder farmers account for 56 - 60 % of the national production. It is shown that total tea exports are above production by 2 - 14 %, except in 2017, when exports were less than production by 5%. The over – export was attributed to carry over from previous years and importation and re-export of teas. A higher proportion of the sales, at 45 - 70% is through the auction, while the direct sales accounted for 24 - 56%.

Destination	Volume	Value	Unit Value
	(Kgs)	(USD)	(USD)
Canada	5,792	5,372,891	927.64
Sweden	60	49,631	827.19
Canada	95	10,100	106.32
Duty Free Shops	53,440	2,710,271	50.72
Germany	10,407	3,184,308	305.98
South Sudan	590	249,442	422.78
Total	70,384	11,576,643	164.48

Table 6; Kenya Speciality Tea Sales 2017

Source AFA TD

#### 3.1.1.6 Tea research

Tea research is undertaken by Tea Research Institute (TRI), through the research station and headquarters in the Rift Valley in Kericho and Kangaita sub-station in Mt Kenya. The Tea Research Institute (TRI), is one the research institutes created under the KALR Act of 2013. It was established to replace the former Tea Research Foundation of Kenya (TRFK), which had

been formed in 1980 to take over tea research activities from the defunct Tea Research Institute of East Africa (TRIEA), following the breakup of the East African community in 1977. The main goal of TRI is to undertake research that addresses the challenges facing Kenya's tea industry, contribute to the overall production, processing and marketing of tea and to improve the industry continually in order to remain globally competitive. The main mandate of TRI is to focus on development of improved clones, appropriate technologies for improvement of yield and quality of tea and tea products.

In addition, TRI has the following obligations:

- Organise, design and carry out on-station and on-farm tea research;
- Plan short and long-term research programmes to address production, policy, market, processing and utilisation constraints;
- Identify and disseminate appropriate systems of mechanization and technology options to improve agricultural production and provide answers to foreseeable problems facing the tea production;
- Disseminate research results and technologies;
- Ensure the rapid introduction, evaluation and use of tea improved technology beneficial to the country;
- Conduct annual reviews of research results and modify research programmes as appropriate;
- Promote demand-driven participatory research, planning and priority setting.

Over the years, the Institute has developed over 914 improved clones, out of which 51 have been selected for consistent superiority in yield and quality and were released for commercialization by both smallholder and large estate growers. The TRI has reoriented its research agenda to focus more on tea products diversification, value addition and Tea health. It is also working on addressing issues on climate change and to enable the tea industry to survive the expected negative impacts.

#### 3.1.1.7 Certification and standards

All the smallholder tea farmers and their factories are certified on Rainforest Alliance (RA). In addition, farmers 14 smallholder tea factories are certified on Fairtrade, but find it difficult to maintain the certification due to reduced purchase of certified tea and premium receipts. Five smallholder tea factories and farmers had been certified in UTZ certified, but dropped it for lack of sales of UTZ certified tea. Multinational estates and factories and smallholder farmers supplying green leaf to the factories are also certified on RA and a few who produce speciality teas on UTZ certified. A number of smallholder farmers affiliated to multinational factories had been certified on Fairtrade through their cooperatives, but have dropped with decrease in volumes of tea sold as Fairtrade certified and hence low premium receipts to take costs of certification to the cooperatives. The old independent factories, their estates and smallholder farmers supplying to them are certified on RA. However, newly constructed independent factories and farmers supplying to them are yet to get any certification.

## 3.1.2 Tanzania

#### 3.1.2.1 Tea regulation

The tea sub sector is directly regulated through the **Tea Board of Tanzania (TBT)**, which is a government institution responsible for regulating the sector including issuing licences for factories to process tea and monitoring the performance of the factories against their licence conditions. TBT also issues export permits and implements the green leaf pricing mechanism. TBT is a corporate body established by the Tea Act No. 3 of 1997 and came into force on the 1st October 1997 following the separation of the regulatory and development functions of the then Tanzania Tea Authority (TTA).

The main functions of the TBT as set out in the Tea Act No. 3 of 1997 (amended 2009) are as follows:

- Advise the Government on the policies and strategies for the development of the tea industry;
- Regulate and control the quality of tea and tea by-products;

- Collect, refine, maintain, use or disseminate information or data relating to the tea industry;
- Monitor the production and exportation of tea;
- Regulate processing, exportation and storage of tea and tea by-products;
- Represent the Government in international and local fora in matters relating to the tea industry;
- Regulate import and export of tea;
- Control pests and diseases;
- Promote and protect interests of farmers against syndicates of buyers, which may be formed through associations;
- Perform any commercial function as the Minister may consider necessary.

The legal framework governing the functioning of the tea industry is outlined in the tea act of 2006 amended in 2009 together with the tea regulations of 2010. The regulations deal with specific issues such as: registration, licenses and permits, quality assurance, grading, weighing and inspection, contract farming, sales and marketing, stakeholders forum, implementation of shared functions and administration of regulatory functions of the board among others.

#### 3.1.2.2 Organisation of the tea industry

Other main organisations playing a Signiant role in the tea industry at the national level include:

**Tanzania Small Holders Tea Development Agency (TSHTDA)**: a governmental agency responsible for promoting the tea sector and in particular SHF tea production, facilitating the provision of extension services to SHFs, and building the capacity of SHF organisations.

**Tea Association of Tanzania (TAT)**: a members association for private sector participants in the tea sector. Responsible for promoting the sector and advocating for pro-private sector reforms. The Tea Association of Tanzania was formed out of the Tanganyika Tea Growers Association (TTGA) which was established in 1940s by large scale tea producers to promote the common interests of the plantation sub-sector members in the cultivation and manufacture of tea, and to promote good industrial relations and sound wage policies for their workers. In 1988 the TTGA merged with the Tanzania Tea Producers Association to form The Tea Association of Tanzania (TAT).<sup>12</sup> This change was partly necessary so that it could accommodate the Blending sub sector of the Industry and the Tea Authority. There are three main categories of membership:

- Grower members who own either a factory or who have at least twenty hectares of tea cultivation,
- Smallholder members who are individuals or corporations and are registered as smallholders having at least twenty hectares of tea but do not own a factory,
- Buying members who are actively engaged in the purchasing of tea to blend and pack.

Currently, the TAT has 22 members of whom 13 are large scale growers and smallholder farmers while 9 are packers. All large estate owners process tea in their own factories, while estates and smallholder farmers deliver leaf to existing tea factories. Each manufacturer is required to be a member of TAT in order to obtain a licence.

**Tea Research Institute of Tanzania (TRIT)**: in 1996 TAT spearheaded the establishment of TRIT, which was the first private research institute to be set in Tanzania. TRIT is a research institution established by the tea industry and funded by the tea sector (private companies) and government through seconding senior staff.

Tanzania Smallholders Tea Growers Association (TASTGA): it is an apex organisation representing the interests of tea smallholder farmers in Tanzania. TASTGA is composed of representatives from all area smallholders' farmers' associations. It is currently in the process of becoming a cooperative.

Smallholder farmers - Cooperatives/ Associations /farmer groups: smallholder farmers in the tea sector occupy just over 51% of the area planted and produce around 37% of the total tea

<sup>&</sup>lt;sup>12</sup> Tanzania's Tea Sector Constraints and Challenges; Africa Region Working Paper Series No. 69; June 2004.

produced in the country. There are over 30,000 households involved in smallholding tea production in Tanzania. They are organised in informal groups, formal and informal associations, cooperatives and companies. All farmers' groups are in process of being transformed into cooperatives.

Below is a list of the large regional farmers' bodies, which include:

Rungwe Smallholder Tea Growers Association (RSTGA): RSTGA was formed in 1988 after it was found that factories after privatisation were giving priority for processing green leaves from their estates and sometimes leaving out smallholder farmers especially in the high crop season. It is the biggest farmer's organisation by membership, with over 15,000 smallholder farmers, which is over 50% of all the smallholder frames in the country. The association helps farmers to sell their green leaf for processing at Wakulima Tea Company factories, where they have 25% shareholding. The association also gives extension services to farmers and provides farm inputs such as planting materials, fertilizers and herbicides and farm implements on credit. It has started other economic projects to help farmers diversify the income from tea such as growing and marketing avocadoes and keeping beehives, harvesting and selling honey centrally. It takes care of farmers in nine district, Rungwe in Mbeya Province in the southern highlands tea growing zone. The farmers are organised in 120 villages, which cluster to form eight schemes. There are officials for the village committee, a chairman, a secretary and one member representing the village in the scheme and each scheme elects four members for the association, who then choose the board members of the association. However, the association is in the process of changing in line with the new requirements of the government through TSTDA to from cooperative. In the new system, the lowest farmers body is Agriculture and Marketing Cooperative (AMCO), which is a primary society whose members are individual farmers. Members elect seven to be in the Board and another member to represent the cooperative at the secondary level, together with chairman and vice chairman. Over 20 AMCOs are required to form the secondary cooperative. For RSTGA, the 8 schemes have converted to AMCOs and as it does not make the minimum of 20, the association will convert in to a Joint Enterprise (JE), which is a step to forming the cooperative.

Njombe Outgrowers Service Company (NOSC) Limited: NOSC is a joint Not-for Profit company of the smallholder farmers in Njombe District (49%), Njombe Province, Southern Highlands Zone with the Woods Foundation Trust Africa (WFTA) (51%). WFTA has provided the funds to run the company while farmers gain shareholding through in-kind contributions; provide land for buying centres and nurseries. It was formed to help farmers achieve part of the requirement of an agreement with Unilever tea company, to put up a factory in the district in which framers would supply 80% of the leaf intake. NOSC was formed to give services to farmers to produce green leaf and meet the quantity and quality required by the factory. The company offers farmers services in four key areas, which are: first, extension advisory services through agronomists employed and paid by government. These are trained and supervised by NOSC, which prepare farmers through the Farmer Field School (FFS) approach and facilitate certification in Rainforest Alliance (RA). Second, they offer support through farm inputs on credit seedlings, nursery materials, fertilizers and herbicides. The cost of the materials is deducted from the green leaf proceeds without interest. Third, they support green leaf collection logistics. NOSC in fact provides transport vehicles and bags for green leaf collection and software for weighing green leaf and processing payment to farmers. Fourth and last, they support through the marketing of green leaf to Unilever Kabambe tea factory, constructed in 2015. The 20% of the leaf intake comes from nuclear estates with total of 334 Ha of tea. Other players in the project include the Department for International Development (DfID) and Gatsby in support of training of farmers, United States Agency for International Development (USAID) on health issues, TRIT in training agronomists and the national and local government in providing land for the factory, seconding Chief Executive Officers (CEOs) and extension staff and improving infrastructure (roads) for efficient green leaf collection.

The company currently serves 1,258, cultivating 1,278 ha of tea with another 314 who have applied to join this year starting in April 2019. Since 2014/15, over 810 ha of tea has been planted, from previous 375 farmers with 614 ha. Through the company, farmers have improved in productivity of quality of green leaf, fetching a quality bonus of TZS110 – 223 over the base price of TZS 314. They have also benefited from the establishment of village saving schemes, starring other farm enterprises such as growing and marketing of avocadoes, poultry leading to reduce malnutrition and training on health issues such as HIV/AIDS. It is planned that the company will be able to sustain its operations from service charge to farmers (5% per kg) while the initial capital will convert to a revolving fund for supply of inputs on credit without charging interest. Farmers

are grouped in to 37 villages, which will increase to 40. In order to meet the new requirements for organisation of smallholder farmers, the village committees have converted to 3 AMCOs with target of 5, which has formed NJOTCOJE as a step to form full-fledged cooperative.

**Mkonge Smallholders Cooperative (MSC)**: MSC is smallholder farmers' cooperative in Mufindi District, Iringa Province of the Southern Highlands Zone. It was formed in 2014 when Unilever Tea Tanzania (UTT), in partnership with The Netherlands' Sustainable Trade Initiative (IDH) launched what is known as Mufindi Out-growers' (MOG) programme. Through the programme, which assures farmers of all the necessary farm inputs from UTT such as fertilizers, tea quality has improved greatly, resulting into increase in prices

#### 3.1.2.3 Tea production

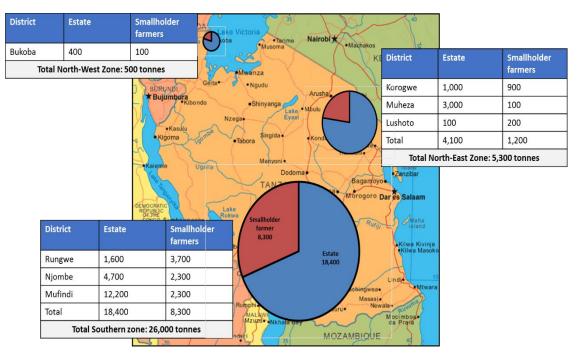
In Tanzania tea is produced in three main zones:

- Southern Highlands Zone, which produces over 70% of the national tea production;
- Northern Zone, which produces 28% of the national production;
- Northern West Zone with one factory, Kagera producing only 2% of the national tea production.

Within the above, the major tea producing districts are: Rungwe, Njombe, Mufindi, Muheza, Karogwe, Lushoto and Bukoba.

Tea is produced by two segments, these being smallholder farmers and plantations. The total national land under tea cultivation is at 22,722 Ha, divided on a 50:50 bases between the two segments. However, for production, the distribution is 70:30 % in favour of the plantations. This demonstrates the lower productivity of the smallholder farmers, at below average of 954 kgs made tea per hectare which is 60% the yield of the estates. The government, through TBT and TSHTDA has started interventions to increase productivity and improve on the quality and quantity of green leaf from smallholder farmers. These interventions include:

- Changing the organisation of smallholder farmers from associations to well-structured cooperatives for better services from the government through TSHTDA and the processing factories. This is expected to facilitate better organisation of green leaf collection logistics, hence prevent loses, improve productivity and quality of green leaf supplied to the factories;
- Providing smallholder farmers with production inputs such as fertilizer by giving credits with no interest;
- Assisting smallholder farmers with planting materials such as seedlings and fertilizer through their cooperatives with objective of increasing the area under tea production for the farmers;
- Identifying new areas in the country that have suitable climatic conditions for growing tea and opening up such areas for tea production;
- Getting development partners for Public Private Partnerships (PPP) programmes for developing smallholders' farmers such as improvement in production, productivity & quality, logistics of green leaf collection, opening of new areas and building of processing of factories.



#### Figure 4 Tanzania Made Tea Production Areas and Volumes, 2007-2015

There are over 30,000 smallholder tea farmers distributed in the tea growing districts, but the majority of them are in the three districts of Mufindi, Njombe and Rungwe in the southern highlands zone. The farmers have small farm holdings of average 0.4 Ha. See list of smallholder farmers in table 7 below. They are organised in village groups, which form schemes and these form associations. The associations have not been very effective in advancing the plight of the farmers, and the government, through TSHTDA has introduced a new management structure for smallholder farmers through formation of cooperatives, to be effective from March 2019. In this new approach, farmers are organised in AMCOs, which form cooperatives. Farmers can only sell green leaf to factories through AMCOs.

District	Factory	Estates	Smallholders	Total
Southern Zone				•
Mufindi	Unilever Tea	3,025.40	1,144.85	
	Itona	896.00		
Sub Total		3,921.40	1,144.85	5,066.25
Njombe	Kibena Tea	706.20	2,295.30	
	Dhow Mercantile	200.00		
	Luponde	603.00	•	
Sub Total		1,509.20	2,295.30	3,804.50
Rungwe	Wakulima Tea Company	308.00	4,094.50	
	Tukuyu Tea Estate	1,177.00		

Table 5 Tanzania Planted Areas by District and Subsector

Source: Tea Board Tanzania (TBT)

Sub Total		1,485.00	4,094.50	5,579.50					
Ludewa		-	7.00						
Sub Total	_	-	7.00	7.00					
Kilolo	TSHTDAª	184.00	21.00						
Sub Total		184.00	21.00	205.00					
Zone Total		7,099.60	7,562.65	14,662.25					
Northen Zone									
Korogwe	Arc Mountain	561.00	603.90						
	Dindira	655.00	_						
Sub Total		1,216.00	603.90	1,819.90					
Lushoto	Herkulu	230.00	1,839.80						
	Mponde	-	_						
Sub Total		230.00	1,839.80	2,069.80					
Muheza	East Usambala Tea Co.	2,200.00	131.10						
	Marvera	210.00							
Sub Total		2,410.00	131.10	2,541.10					
Bukoba	Kagera Tea	316.50	1,312.00						
Sub Total		316.50	1,312.00	1,628.50					
Tarime		-	-						
Sub Total		-	-	-					
Zone Total		4,172.50	3,886.80	8,059.30					
National Total		11,272.10	11,449.45	22,721.55					
TSHTDA =	Tanzania Smallholder	Tanzania Smallholder Tea Development Agency							

Source: TBT

Table 6 Tanzania National Made Tea Production

Sector	2013/14	2014/15	2015/16	2016/17	2017/18
Estates	22,933,216	23,830,273	22,813,820	17,680,345	21,676,576
S/Holder	10,599,252	11,919,496	9,814,860	9,295,042	11,977,820
Total	33,532,468	35,749,769	32,628,680	26,975,387	33,654,396

Source: TBT

#### 3.1.2.4 Tea processing

There are 22 tea processing factories, all manufacturing black CTC teas. The factories used to be owned by state, but were privatized and sold to private investors, both local and foreigners in 2000/01. Before privatisation, production in the country was low at 19,000 - 20,000 Metric Tons per year. After privatisation, production has increased significantly to 35,000 metric tons in 20 years. There was high increase in quality and price realised in the market. The factories are

owned by the private investors, but some have issued smallholder famers supplying green leaf with shareholding of 25 – 30%. Main grades produced are primary grades BP1, PF1, PD and D1 and secondary grades of F1, Dust and BMF (please Table 1 in the Definitions section). Most of the factories retain old and low capacity machinery, but some under new management are overhauling the machinery setup and replacing old machines and equipment with modern, semi-automatic high technology machines. The staff deployed in the factories are fairly well qualified, with long experience. They train in local colleges and universities on general courses and gain tea specific skills through on-the-job training. A number of factories have employed expatriates from Asia (India and Sri Lanka) and Kenya at the higher echelons of management. Quality control is undertaken in the factories and reinforced by the TRI and brokers.

	Made Tea Produced (Kgs)							
Producer Organisation	2014	2015	2016	2017	2018			
Bombay Burmach	677,147	566,483	544,971	720,607	895,168			
METL Ambangulu	912,147	549,411	614,270	794,672	1,067,634			
METL Balanga/Dindira	1,541,269	1,147,919	1,279,571	1,780,076	2,166,047			
METL Tukuyu	2,410,000	1,465,337	1,341,000	2,032,546	1,849,521			
Unilever Tea Tz Ltd	11,229,309	10,170,638	9,035,012	10,097,328	10,019,200			
East Usambala Tea Co.	2,659,732	2,658,150	2,328,929	2,337,515	3,372,408			
Mufindi Tea & Coffee	5,340,413	5,668,145	4,327,619	3,641,184	4,631,788			
Ikanga Factory	2,104,899	1,978,054	1,698,189	1,610,021	1,688,686			
Kibena Tea Limited	3,594,893	3,571,710	3,084,996	2,032,546	2,352,468			
Kagera Tea Company	617,557	532,402	398,181	367,921	561,825			
Wakulima Tea Company	4,672,922	4,135,657	3,689,562	5,338,051	5,519,402			
Kisigo Tea Co. Ltd	286,321	142,634	120,255	322,041	464,342			
New Mponde Tea Factory	-	-						
Lupembe Tea Factory	-	-						
Total	36,046,609	32,586,540	28,462,555	31,074,508	34,588,489			

Table 7 Tanzania Made Tea Production by Producer

Source: TBT and TAT

#### 3.1.2.5 Tea marketing

The bulk of the tea is exported and exports account for 80 - 85 % of the national production. The rest 10 - 15 % is consumed locally. Tea for local consumption is packed and distributed through

nine blending and packing factories that buy tea from the processing factories. Eight of the nine factories blend and pack teas for local consumption only, while one also packs tea in value added form for exports, by re-packaging in smaller sizes for placing directly to the shelves in the export destination countries.

Tea for export goes through two market outlets:

- The Mombasa Auction, which accounts for about 40% of the exports.
- Direct sales, which account for about 60% of the exports. The major destination countries are: Russia, Pakistan, UK, South Africa, Netherlands and Singapore.

Tea from Tanzania fetches low prices, being in fourth category after Rwanda, Kenya and Burundi. The government is currently exploring the establishment of a tea auction in Dar es Salaam, for such teas to be exported directly through the port.

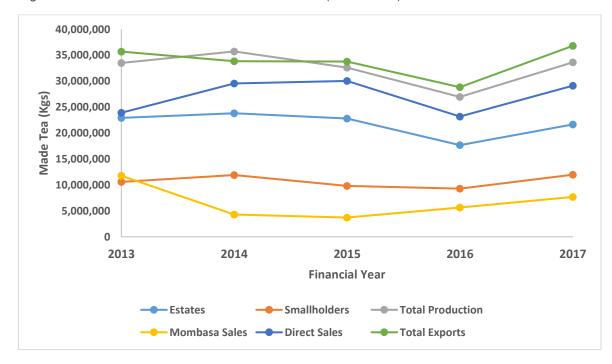


Figure 5 Tanzania Tea Production and Sales Trend (2013 -2017)

From the information in Figure 5 above, it can be observed that there has been little change in production over the last five years, in both the plantation and the smallholder sub sectors. Production by smallholder farmers accounted between 30 to 36% of the total. However, the variation in total production over this short period between the highest and lowest is as high as 25%. It is shown that total tea exports are above production by 4 - 9%, showing importation and re-export of teas. A higher proportion of the sales, at 71 - 92% is through the direct sales window, while the Mombasa Auction handles 11 - 35%, there was a major drop in auction offerings form the year 2013/14.

#### 3.1.2.6 Tea research

Main research is conducted through the TRIT. The research institution was established by the tea industry in 1996 and is directly funded by the tea sector (private companies) while the government supports through seconding senior staff. The main goal of TRIT to support the development of the tea industry, both small and large scale producers, through appropriate, cost effective, high quality research and technology transfer, to ensure the sustainability of the industry.

TRIT's objectives are to:

- Solve problems of immediate concern to the industry;
- Identify the financial benefits of research recommendations;
- Disseminate the research findings to the industry in a simplified format;

- Provide mechanisms for implementation of the research findings;
- Publicise her work in peer group review scientific publications.

TRIT, in collaboration with TRI (then TRFK) has released four new superior clones, which have improved quality and are drought resistant, for commercial production in the country.

#### 3.1.2.7 Certification and standards

Most estates and factories are certified on Rainforest Alliance (RA) while smallholder farmers are implementing requirements for RA through their producer organisations (associations, companies or cooperatives) such as RSTGA, NOSC and MSC in preparation for certification. The smallholder farmers used to be certified on Fairtrade, but have not been renewing the certification, due to reduced purchases of certified tea, hence little income as premium to meet the costs of certification. In addition, for factories, they are inspected annually, by the Tanzania Bureau of Standards (TBS) on factory standards.

#### 3.1.3 Burundi

#### 3.1.3.1 Tea regulation

The bulk of tea from Burundi is managed through the OTB, which is a public enterprise created through a Presidential Decree No. 1/79 of 30<sup>th</sup> July 1971. The organisation operated as monopoly in the tea sector until 2007, when the tea sector was liberalized through another decree No. 100/263 of 20<sup>th</sup> September 2007, however, the regulations have not been fully implemented. The mission of OTB is to promote tea production at the national level and to commercialise tea products. OTB is placed under the supervision of the Ministry of Agriculture and Livestock. It undertakes all the functions in the sector, including supply of inputs such as fertilizers, planting materials, collection of green leaf and delivery to factories, processing of green leaf in the factories in to made tea and marketing of made tea.

Another government institution that plays a role in the tea value chain is the ministry of commerce through the Burundi Bureau of Standards and Quality Control (BBN). BBN is a government agency that has responsibility to provide services in standardisation by developing, adopting and adapting national standards in quality assurance, certification, inspection, conformity assessment, metrology and testing.

The ministry of Finance through the Central Bank (BRB) and Office Burundais des Recettes (Burundi Revenue Authority) (OBR) facilitates the export process. BRB issues the export licence, while OBR processes the export licence.

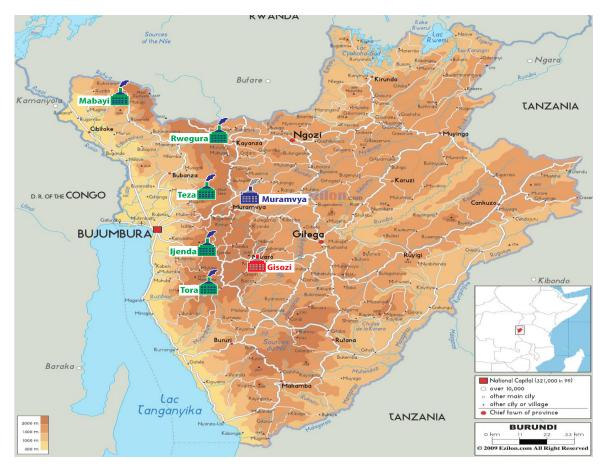
#### 3.1.3.2 Tea production

In Burundi, the tea industry is mainly under the control of the government through the OTB, which operates in five tea factories: Buhoro, Ijenda, Rwegura, Teza and Tora. Each tea factory has two production structures, namely the industrial block, that belong exclusively to the OTB and the tea farms belong to the smallholder farmers. There are over 66,000 smallholder tea farmers, organised in 421 farmers' associations. The total land under tea cultivation is 10,600 ha of which 1,920 ha is in industrial blocks and 8,680 ha is with smallholder farmers.

For a long time period the government maintained a monopoly in tea production and processing, until the establishment of Prothem Usine SA in 2002 and construction of the private tea factory, Gisozi, which started operations in 2011. The company has a plantation of 28 Ha and has contracted 10500 farmers who have cultivated 978 Ha of tea bushes. A third tea producer is constructing a factory at Muramvia, which is expected to start operations towards the end of the year 2019.

Tea ia cultivated in three regions, namely the north west region of Mugamba, which is located in high mountain areas, central region of Mwaro Province with medium altitude and the south west region of Mumirwa located in low altitude area. National tea production is organised under the auspices of the National confederation of the Associations of Tea Growers (CNATHE). For further details see the map presented in Figure 6 below.

#### Figure 6 Tea Growing Areas of Burundi



The area under tea cultivation, green leaf production and number of smallholder farmers in 2018 are shown in Table 8 below.

Producer	Factory	Industrial Block		Tea Farmers		Total		Number of Tea
		Area (Ha)	Green Leaf (000' Kgs)	Area (Ha)	Green Leaf (000' Kgs)	Area (Ha)	Green Leaf (0000' Kgs)	Farmers
OTB	Buhoro	300	2,657	737	2,748	1,037	5,405	2,400
	ljenda	0	0	2,440	9,311	2,440	9,311	22,800
	Rwegura	720	6,205	2,180	9,866	2,900	16,071	13,400
	Teza	600	3,350	1,623	7,184	2,223	10,534	13,300
	Tora	300	1,680	1,700	7,819	2,000	9,499	14,100
	Total	1,920	13,892	8,680	36,928	10,600	50,820	66,000
Prothem	Gisozi	28	2	978	2,781	1,006	2,783	10,500
Grand Total	•	1,948	13,894	9,658	39,709	11,606	53,603	76,500

Source; OTB & Prothem

#### 3.1.3.3 Tea processing

Tea is processed through the five OTB factories and the single private tea factory of Prothem. Apart from obtaining green leaf from the state estates, the factories also receive green leaf from smallholder farmers. The factories have different capacities: Rwegura has three processing lines with capacity of 15 million kgs of green leaf per years, Ijenda, Teza and Tora have two lines with capacity of 10 million kgs green leaf per year and Buhoro has one line with capacity of 5 million kgs green leaf per year. Gisonzi has one line for black CTC tea with capacity of 6 million kgs per annum and one line for black & green orthodox teas. However, the capacity is exceeded in most factories, especially during the high flush seasons. The factories have a mixture of fairly old machinery and modern machinery that do not match in capacity. The staff is well trained thanks to general courses in institutions of higher learning, both in the country and outside, and on-jobtraining for specific tea skills. OTB and Prothem has both engaged experts from Kenya to train agriculture and factory processing staff. Quality control is undertaken in the factories by the Tea Maker and the factory quality control team and reinforced with brokers. All the tea produced is CTC black. Tea grades produced include BP1, PF1, PD and D1 in the primary category and F1, Dust and BMF in the secondary category. OTB is running trials on speciality tea; green tea and orthodox tea in one of the factories, Buhoro. In 2018, 3 tons of green tea was produced and released to the local market. Production has been increasing slowly as shown in Table 9 below.

Producer	Factory	Tea Proc	duction (M	etric Tons)				
		2013	2014	2015	2016	2017	2018	2019 (Projection)
OTB	Teza	1,867	1,941	2,138	2,450	2,261	2,299	2,610
	Rwegura	3,008	3,333	3,543	2,908	3,038	3,373	3,552
	Tora	1,703	2,400	2,595	1,719	1,729	1,932	1,873
	ljenda	1,671	1,884	1,714	2,002	1,658	2,034	1,912
	Buhoro	862	973	962	1,160	1,160	1,123	1,110
	Sub Total	9,111	10,531	10,952	10,239	9,846	10,761	11,057
Prothem	Gisozi	1,188	1,159	700	810	952	618	
Grand Total	TB & Prothem	10,299	11,690	11,652	11,049	10,798	11,379	

Table 9 Burundi National Tea Production 2013 – 2018

ource: OTB & Prothem

#### 3.1.3.4 Tea market

There are two market segments in Burundi, the domestic market and that of exports.

- Domestic market, which is low and accounts for less than 10% of national production. This tea is supplied through packing by OTB and two other blending and packing factories.
- Exports, which account for over 90% of the national production. Exports are handled through two market outlets:
  - Mombasa Auction:
  - \_ Private (direct) sales.

Table 10 Burundi Tea Sales through Auction, Direct and Local Markets

Market Outlet	Description	Unit of Measure	2013	2014	2,015	2016	2017
ОТВ	I				<u> </u>		
Mombasa Auction	Volume	Kgs	7,175,895	8,046,094	8,667,429	8,475,603	7,467,948
Auction	Average Price	USD/Kg	2.41	2.15	3.08	2.43	2.92
	Total Value	USD	17,293,907	17,299,102	26,695,681	20,595,715	21,806,408
Private Sales	Volume	Kgs	1,565,420	1,790,202	1,786,810	1,608,094	1,752,330
Sales	Average Price	USD/Kg	2.25	2.25	3.19	2.24	2.86
	Total Value	USD	3,522,195	4,027,955	5,699,924	3,602,131	5,011,664
Total Exports	Volume	Kgs	8,741,315	9,836,296	10,454,239	10,083,697	9,220,278
Expons	Average Price	USD/Kg	2.38	2.17	3.10	2.40	2.91
	Total Value	USD	20,816,102	21,327,057	32,395,605	24,197,846	26,818,072
Local	Volume	Kgs	466759	452355	370926	524793	418378
Sales	Average Price	BIF/Kg	3156	3249	3516	3014	3242
	Total Value	BIF ('000)	1,473,091	1,469,701	1,304,176	1,581,726	1,356,381
Total Sales	I	Kgs	9,208,074	10,288,651	10,825,165	10,608,490	9,638,656
Percent Exp	orts	%	94.9	95.6	96.6	95.1	95.7
Prothem		<u> </u>	<u> </u>			<u> </u>	
	Green Leaf	Kgs	5,258,000	5,493,215	3 224 384	3,725,294	4,399,077
Production	Made Tea	Kgs	1,188,000	1,155,800	700,054	809,138	951,694
	Volume	Kgs	0	0	0	8,000	0
Local	Average Price	USD/Kg	0	0	0	1.09	
Sales	Value	USD.	0	0	0	8,686	
	Volume	Kgs	1,190,000	1,114,000	567,000	568,965	743,396
Exports;	Average Price	USD/Kg	2.25	1.84	2.66	1.94	2.25
Mombasa Auction	Value	USD.	2,674,351	2,052,378	1,506,011	1,101,191	1,699,886
	Volume	Kgs	0	0	105,000	171,800	182,000
Direct	Average Price	USD/Kg	0	0	2.68	1.66	2.09
Direct Sales	Value	USD.	0	0	281,128	285,188	381,048

Source: OTB & Prothem

The trend in production and sales through the auction and direct sales is expressed in Figure 7 below.

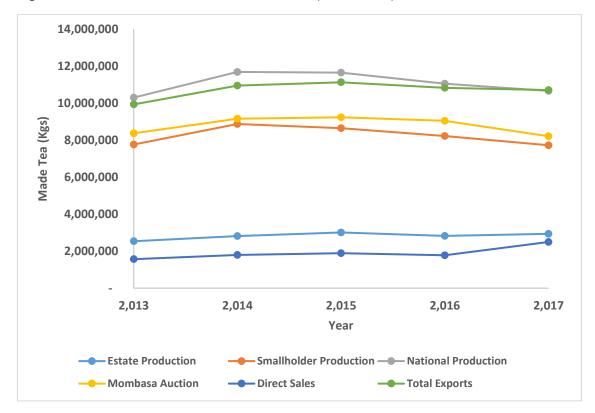


Figure 7 Burundi Tea Production and Sales Trend (2013 - 2017)

Source: OTB & Prothem

From the information in Figure 7 above, it can be observed that there has been little change in the production trend over the last five years. However, the variation in production over this short period between the highest and lowest is high at 12%. It is shown that between 96 – 100% of the national tea production is exported, of which 77 – 82% is through the Mombasa Auction, while 15 – 23% is sold through the direct sales window.

#### 3.1.3.5 Tea research

There is no tea research organisation in the country yet. The industry liaises with the TRI in Kenya and TRIT in Tanzania for research findings.

#### 3.1.3.6 Certification and standards

All the five OTB factories, their affiliated estates and smallholder outgrowers are certified on Rainforest Alliance. Ijenda, Rwegura and Tora are certified since 2014, while Buhoro and Teza got certified in 2016. The factories are also inspected annually by the Burundi Bureau of Standards (BDS) on factory standards. OTB is seeking for funding to implement quality management systems (QMS) and food safety management systems (FSMS) based on ISO 9001 and 22000 respectively, which are required in some market segments, for example FSMS in Iran.

# 3.2 Post Processing Activities (Tea Trade)

The main organisation that facilitates tea trade in the Eastern Africa region is the **East African Tea Trade Association (EATTA)**, which is the umbrella body that represents the interests of the tea industry in Africa. It has members in 9 countries. EATTA as an organisation spans its initial origins as a Nairobi based facilitator of tea auctions in 1956. In 1969, it relocated offices to Mombasa, in 1992 it initiated tea trading in US dollars and in 1998 moved operations to the current Tea Trade Centre as it started rapid growth with the closure of London Auction same year. The affairs of the Association are monitored and directed by a Management Committee, which is made up of the office bearers from the sub- associations. Each branch of the trade (producers, buyers, brokers, warehousemen, and packers) has its own association to address matters relating to their sector of the trade. The office bearers of the sub associations are elected by members annually and jointly make the committee of EATTA that comprises of six producer members, six buyers, three brokers and one warehouseman. These members are formally elected to the Management Committee each year at the Annual General Meeting. In turn, this committee elects its Chairman and Vice Chairman, co-opts additional members and appoints sub-committees as it may deem fit. Among those co-opted is one representative each from the Tea Directorate and Tea Packers' Association. The detailed work of the Association is carried out by seven sub-committees, each addressing issues pertaining to an important function of the trade: trade issues, rules, public relations and education, shipping, staff and finance, packaging and auction conditions, and warehousing. Members of the Management Committee chair these sub-committees. The functions of the association are coordinated by a Secretariat, which also runs the daily operations of the sub associations. Both EATTA and the sub associations are funded through members' contributions.

The principal mandate of EATTA is to provide a platform for the tea auction to take place. Other roles and mandate of the organisation include:

- Promote interests of the tea trade in Africa through lobby to national governments;
- Foster closer working relations among members of the tea industry;
- Establish facilities for the orderly sale of teas of African origin in a centralised format;
- Facilitate the settlement of disputes within the tea trade;
- Facilitate exchanges and interactions between members for networking, discussing their issues of concern and sharing;
- Collect and circulate statistics and trade information and to maintain such records as may be of assistance to members in the conduct of their business affairs;
- Act as a link between the trade and governmental and related bodies.

Other organisations that facilitate trade and are members of EATTA include:

**Tea Warehousing Association (TWA)**: a member body of the 18 warehousing companies in Mombasa registered with AFA – TD and EATTA. It is governed through the Chairman who is a member of the EATTA Board and depends on EATTA management for secretarial services. Her services to members include:

- Advocacy services;
- Liaising with other stakeholders' issues that affect our members such as KRA, KEBS, Kenya Ports Authority (KPA), Tea Brokers, buyers, packers etc;
- Licences issues Business, KRA;
- Business promotions;
- Trade fairs advisories.

**Tea Brokers Association**; a member body for the 12 tea brokerage firms that are registered by AFA TD and are members of EATTA. It is governed through the chairman who is a member of the EATTA Board and depends on EATTA management for secretarial services. Her services to members include:

- Advocacy services;
- Liaising with other stakeholders' issues that affect members such as KRA, Tea producers, warehousemen, buyers and packers;
- Licences issues Business, KRA.

**Tea Buyers Association**; a body of the 86 tea buying companies registered by AFA TD, are members of EATTA and buy tea at the Mombasa Auction. It is governed through the chairman who is a member of the EATTA Board and depends on EATTA management for secretarial services. Her services to members include:

- Advocacy services;
- Liaising with other stakeholders' issues that affect members such KRA, KEBS, KPA, Tea Producers, Warehousemen Brokers and Exporters;
- Licences issues Business, KRA;
- Business promotions;
- Trade fairs advisories.

**Tea Packers Association**; a body of the 10 tea packing companies registered by AFA TD and are members of EATTA. It is governed through the chairman who is a member of the EATTA Board and depends on EATTA management for secretarial services. Her services to members include:

- Advocacy services;
- Liaising with other stakeholders' issues that affect members such KRA, KEBS, KPA, Tea Producers, Warehousemen Brokers and Buyers;
- Licences issues Business, KRA;
- Business promotions;
- Trade fairs advisories.

For the complete list of EATTA members under the different categories please refer to Appendix 9.

#### 3.2.1 Transport, Logistics and Warehousing Providers

A number of companies provide transport, logistics and storage services to facilitate the movement of the tea from the tea factories to the warehouses in Mombasa where they are stored before and after the auction. A number of companies provide all the three services in an integrated fashion, while others provide just one service. Due to nature of their business, transporters do not specialise in the transportation of tea and as such they are not organised under an association. The providers of warehouse and logistics services are organised into an association known as the TWA based in Mombasa whose role it is to advocate for the rights of their members in the sector and are members of EATTA. Apart from storage of tea, the warehouses provide other services such receiving tea samples from factories and dispatching to brokers, sampling of teas for brokers and buyers and preparation of tea consignments for shipping and export.

#### 3.2.2 Auction

A tea auction is held at the port city of Mombasa on Mondays and Tuesdays throughout the year. The wide variety of quality and progressively increased quantity offered through the auction have made Mombasa the second largest black tea auction centre in the world, after Colombo in Sri Lanka. However, unlike India and Sri Lanka, where tea is seasonal, production in this region is all year round. Currently, teas for sale are offered from 11 countries: Burundi, the Democratic Republic of Congo, Kenya, Malawi, Madagascar, Mozambique, Rwanda, Uganda, Zambia and Zimbabwe. Tea from EAC countries combined constitute 97% of the tea that is sold in the auction. Table 11 below shows the EATTA membership.

Category	Total	Bur	DRC	Eth	Ke	Mdg	Mlw	Rwa	Tz	Ug	Region
Producers	84	2	3	1	36	3	2	11	6	19	
Broker	11										11
Buyers	85										85
Warehouse	18										18
Packers	10				10						10
Associate	6				5			1			6
Total Membership	214	2	3	1	51	3	2	12	6	19	

Table 11 EATTA Membership Summary

The most prominent participating markets include Pakistan, Egypt, the United Kingdom, Afghanistan, Sudan, Iran, Yemen, United Arab Emirates, Russia, Eastern Europe, Ireland, Somalia, Canada and Singapore.

The tea auction is run by EATTA and takes place every week throughout the year except in the last week of December, during Christmas holidays. Secondary grades are sold on Mondays and primary grades of Tuesdays, except if there is a national holiday and the day is pushed forward. The tea is sold in US dollars. The auction has been running manually, but there is currently a program to convert it to online trading by the end of this year (2019), as reported by the MD of EATTA. At present, it is possible for members to see the progress of trading on the floor and the hammer prices as the auction progresses in their offices through satellite link.

Over the years the quantities of tea traded in the auction has reflected the growing season as can be seen in Table 12 below:

Country	2013	2014	2015	2016	2017	2018
Burundi	8,407,376	9,987,066	9,263,929	8,894,360	8,210,891	8,748,985
DR Congo	198,948	86,739	19,610	21,278	81,979	41,386
Ethiopia		-	-	-	-	613,603
Kenya	295,032,839	330,689,628	358,638,738	326,208,435	316,031,352	358,108,272
Madagascar	158,620	127,348	39,876	59,840	59,844	19,944
Malawi	287,952	-	82,820	-	-	-
Mozambique	2,326,565	3,371,525	548,756	1,239,676	769,353	585,378
Rwanda	16,176,155	13,034,351	12,493,880	12,554,351	14,393,315	19,850,254
Tanzania	6,527,105	7,563,620	42,446,935	3,429,839	7,246,079	11,250,115
Uganda	55,061,553	53,848,885	44,882,003	4,326,068	48,855,464	58,863,098
Total	384,177,113	418,709,162	68,416,547	396,733,847	395,648,277	58,081,035

Table 12 Tea Traded in the Auction 2013 – 2018

Source: EATTA

#### Table 13 Grades of Tea Sold in the Auction in 2018

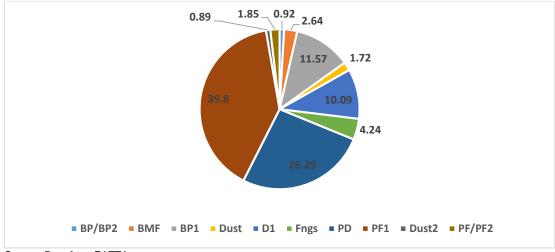
Grade	Quantity	Grade (%)	Price (USD)	Total Value (USD)
PF1	182,378,184	39.80	2.65	483,302,187.60
PD	120,477,454	26.29	2.50	301,193,635.00
BP1	53,032,911	11.57	2.44	129,400,302.84
D1	46,260,228	10.09	2.54	117,500,979.12
Primary Total/Ave	402,148,777	87.76	2.56	1,031,397,104.56
Fannings	19,428,301	4.24	1.46	28,365,319.46
BMF	12,089,327	2.64	1.07	12,935,579.89
Dust	7,860,615	1.72	1.69	13,284,439.35
PF	7,466,579	1.63	1.57	11,722,529.03
Dust2	4,061,454	0.89	1.39	5,645,421.06
BP	4,020,090	0.88	1.71	6,874,353.90
PF2	1,008,241	0.22	1.43	1,441,784.63
BP2	178,620	0.04	1.21	216,130.20

Secondary Total/Ave	56,113,227	12.24	1.43	80,485,557.52
Total/Ave	458,262,004	100.00	2.43	1,111,882,662.08

Source: EATTA

Grades of tea sold in 2018 are shown in Table 13 and Figure 8.

#### Figure 8 Auction Grade % (2018)



Source: Data from EATTA

From data in Table 13 and Figure 8 above, it was observed that there was high duplication of grades, which resulted in tea loosing value. For example, BP2 instead of BP with loss of USD 0.50 pr kg, PF2 from PF loosing 0.14 USD per kg and Dust2 from Dust loosing USD 0.30 per kg, the proportion of BMF grade was also noted high, reflecting poor quality leaf being delivered to factories for processing and lowering value of tea. For further details, see sales per grade per country for 2013 – 2018 in the appendix.

#### 3.2.2.1 International trends of tea demand for East Africa

In EA tea production is superior to tea consumption. In fact, domestic consumption in the region accounts on average for 6%, meaning that the remaining 94% is exported. Over 70% of the exported tea is sold in bulk through the Mombasa Auction. The tea from the region continues to be in high demand both for its quality and year-round consistent supply. The region accounts for 30% of global black tea exports, hence has a dominance in the tea drinking world. In particular, for black tea, which is the overwhelming majority of tea drank in the world, East African tea accounts for 98% of the tea taken in Sudan, 90% in Egypt, 70% in the UK and 75% in Pakistan.<sup>13</sup> The demand in these traditional destinations is steady, but at fluctuating prices. However, it is affected by factors that influence consumption in these regions such as seasons, especially summer and winter in Europe and observance of religious rituals in the Middle East. The demand for tea from the region, especially for secondary grades is increasing with the opening up of Somalia and South Sudan as new and prospective members of EAC, as well as an increase in demand Democratic Republic of Congo, especially for teas from Burundi. The main demand has been for clean good quality primary grades, suitable for tea bag markets, but there is emerging demand for new varieties especially green, purple, herbal infusions and instant tea for millennials and urban affluent and the growing middle class. There is also a growing demand for high end teas and healthy blends.

<sup>&</sup>lt;sup>13</sup> International Tea Council Tea Statistics Bulletin 2017

#### 3.2.3 Brokers

There is a total of 11 registered companies who operate as tea brokers at the Mombasa Tea Auction. The brokers are organised under the Tea Brokers Association (TBrA), which advocates for the rights of its members. Tea brokers assist in selling tea on behalf of producers in addition to tasting tea for quality verification purposes, evaluating tea quality based on seasons and prevailing market conditions, determining the best prices for different tea qualities and supervising the correct handling and market transactions of tea. They also visit the factories to check and advise on manufacture of quality tea. Most factories contract more than one broker for selling their marks to create competitiveness. They charge a brokerage fee of 1.25% of the selling price; 0.75% comes from the producer and 0.5% from the buyer.

The brokers sales by volume are shown in Table 14 below.

S/N	Broker Name	Quantity (Kgs)					
0.		2014	2015	2016	2017	2018	
1	Africa Tea Brokers Ltd	62,889,334	45,779,380	45,303,592	45,046,935	53,778,555	
2	Anjeli Ltd	42,054,989	36,559,314	43,581,062	49,701,253	56,822,695	
3	Atlas Tea Brokers Ltd	-	941,886	8,208,128	12,064,532	16,371,793	
4	Bicorn Exim Ltd	20,148,456	19,594,820	27,606,916	31,069,468	34,780,813	
5	Centreline Tea Brokers Ltd	22,514,737	20,188,502	21,886,935	21,858,555	20,225,391	
6	Choice Tea Brokers Ltd	24,808,668	21,224,007	23,949,270	21,906,916	24,040,012	
7	Combrok Tea Brokers Ltd	46,607,805	40,285,939	46,599,327	46,789,262	53,725,735	
8	Prudential Tea Brokers (E.A.) Ltd	36,637,529	31,035,984	33,188,071	32,351,326	35,251,316	
9	Tea Brokers East Africa Ltd	45,758,404	45,177,553	50,601,998	49,775,752	59,518,928	
10	Union Tea Brokers Ltd	61,238,730	48,160,742	35,967,575	27,217,813	28,020,930	
11	Venus Tea Brokers Ltd	57,456,260	49,634,848	60,008,284	59,715,848	75,725,835	
	Total	420,114,910	358,582,975	396,901,157	397,497,658	458,262,001	

#### Table 14 Brokers Sales Volumes

Source: EATTA

#### 3.2.4 Buyers

Tea buyers are the main participants at the tea auction together with the brokers. They represent their clients from all over the world. Their clients are typically not the end consumers but rather tea packers, locally & international and other actors who further add value to tea through blending or manufacturing beverages and other tea-based by-products. They play the important role of linking tea producers to foreign processors and consumers and they can also be instrumental in facilitating access to new foreign markets. They are organised under the Tea Buyers Association umbrella which advocates for the rights of its members. Sometimes they visit factories in the company of brokers to assess quality and advise on the quality of tea demanded by the market.

There has been little change in the ranking of the major tea buyers by volume, except for a few new entries as shown in Table 15 below.

Table 15 Major Tea Buyers Purchases

1			2014	2015	2016	2017	2018
	Global Tea Commodities (K) Ltd	47058700	48,497,892	45,575,633	51593741	59,883,595	66,338,299
2	Cargill (K) Ltd	62778645	88,310,294	80,021,444	62255790	59,119,877	65,680,708
3	L.A.B. International (K) Ltd	32003067	33,250,051	29,798,303	40262685	31,807,233	43,180,397
4	James Finlay Mombasa	27957942	31,623,928	31,479,513	38211489	31,013,494	37,008,178
5	Chai Trading Company Ltd	20384098	17,737,369	23,670,980	29937095	31,417,811	36,101,137
6	Van Rees Limited B.V	22535863	15,934,970	11,259,854	16474517	15,455,126	24,378,967
7	Devchand Keshavji (K) Itd	19973953	14,823,270	15,015,277	24153597	23,078,494	22,919,830
8	Mombasa Coffee Limited	22344907	23,136,378	16,278,299	20796862	22,512,093	21,887,151
9	SSOE (Kenya) Ltd	0	433,358	6,895,378	11616895	17,747,934	20,624,551
10	Cofftea Agencies Limited	22790688	18,884,288	18,275,233	17795954	17,544,546	20,016,008
11	M.J. Clarke Ltd	16583561	17,276,321	14,259,714	16643922	13,340,151	16,660,431
12	Others	89,898,530	80,520,925	66,109,111	78,246,300	74,772,529	83,564,912
Total		384,309,954	390,429,044	358,638,737	407,988,847	397,692,883	458,360,569

Source: EATTA

#### 3.2.4.1 Purchasing preferences

Tea purchasing preferences at the Mombasa Auction for bulk black CTC tea depend on quality. The quality of tea is determined primarily by the area of growth in terms of altitude and soil chemistry and weather factors such as rainfall amount and pattern, husbandry practices during growth, plucking practices as well as the processing standards at the factory. The factors that are manipulated to influence quality include husbandry practices, plucking practices (manual vs machine and fine vs coarse), leaf collection and factory operations. Traditional destinations have different grade and quality preferences. Europe prefers the bright, coloury large particulate grades such as BP1, PF1 and to some extent PDs. The grade of PF1 is the best seller and mainly determines the demand and pricing of the tea. The Middle East sub-continent prefers the main grades, in particular the very black, clean leaf that has strong liquors. The majority of local consumers are first price conscious and quality comes second. The common grades are PF1, Fannings (F) and Dust and blended tea.

The tea grading is also a factor that affects the purchasing criteria in the auction, which is organised into two sessions, namely the Secondary Grade Auction on Mondays and the Primary Grade Auction on Tuesdays. Primary grades include BP1, PF1, PD and DUST 1, while the main secondary grades are F, Dust and BMF. Other secondary grades that are variants of the above grades include BP, BP2, PF, PF2, PD2, F1, F2, Dust2, BMF1 and BMFD. Different regions prefer different grades depending on the tea drinking norms. Markets in which consumers cook tea in a pot prefer the larger granular tea such as BP1 and PF1. Tea bag markets will prefer the smaller granules of a PD, Dust 1 and quality Fannings.

**Local Purchasing Preferences** – local consumption is low due to unaffordability, teas not readily available over several places, lack of finances and existence of other competing beverages. Purchases are mainly of the lower quality teas that are affordable.

**Regional Purchasing Preferences** – similarly low consumption due to reasons given above as well as some trade/ tariffs/ barriers that limit movement of tea across borders.

Majority of purchasers in local and regional markets buy secondary teas for local market and in small quantities. Tea is considered as a basic food item in the local market within East Africa. Only a very small elite group has developed specifications of taste. A basic good means that not much thought is put into the purchase of the product, since it accounts for a small fraction of the average households shopping budget. Tea is consumed with milk and sugar, therefore, the costs of milk and sugar may impact on the consumption of tea.

As a pointer to the local market, in Kenya, local consumption increased from 29 million kgs in 2016 to 37 million kgs in 2017, an increase of 27%.<sup>14</sup> The value of tea consumed in the domestic market was KES 15 B in 2017 compared KES 12 B in 2016, an increase of 25%. The local consumption for 2017 was the highest over a period of five years. The high increase in local consumption was credited to more sales by Packers and processing factories, attributed to stable macro-economic stability and sustained purchasing power amongst the consumers.

International Buyers purchase tea as per their requirements subject to affordability and quality. For our traditional markets of Europe and Middle East, they mainly prefer straight lines of primary grades of BP1, PFI, PD and Dust 1. North America/Europe is a market for premium teas, tea bags, instant and green tea. Globally demand for loose tea is coming down. The secondary grades are gaining traction for markets in the Horn of Africa.

#### 3.2.5 Packers

There are over 250 registered tea packing firms in Kenya, including all the tea processing factories. They range from big multinational companies, packing for export as well as domestic market, through national companies with countrywide distribution channels, medium companies with county and inter-county markets to small and micro firms with localized distribution in cities and big towns. A large number is dormant.

For the full list of packers in the AFA TD, please see the appendix.

Ten of the major tea packing companies, are registered members of EATTA and have formed the Tea Packers Association. They buy most of their tea from the buyers in the auction, and only few buy directly in the auction. They also but tea directly from the factories through the Direct sales window. Most of the tea bought is for export, but they also pack for local market through their own brands or by selling to smaller packers. The complete list of packers who are members of EATTA can be found in the appendix.

Packers in the SME category who buy and pack tea in Mombasa have organised themselves and formed the Mombasa SME Tea Association (MSTA) with the objective of addressing the bottlenecks in the value chain that affect them. The association is not an associate member of EATTA, but is aligned with AFA TD, as an initiative by the government to support SMEs in the tea trade. See the full list of members of the MSTA in Appendix 10.

#### 3.2.6 Local Consumer Trends

Local consumption is low at less than 6% due to high prices and also due to competition with some other alternative beverages that may appear cheaper such as soft drinks and beer. Tea consumption is still low accounting for lower per capita compared to other tea producing countries. Since tea is a basic product not much has changed in consumption patterns. The norm is that tea is brewed by mixing it with milk then sugar is added. Majority of families consume tea in the morning as a repeated trend and then may be at 10 AM and 4 PM for a few. The local market is a traditional loose tea market, but tea bags are gaining markets with the affluent and in high end hotels and restaurants, especially for service to tourists. A notable trend is the rising health conscious consumer segment, which is driven by active promotion of packers through demos on tea brewing, teaching the consumer about the health benefits of each type of tea and how the tea should be prepared and consumed to achieve health benefits. The younger generation is not

<sup>&</sup>lt;sup>14</sup> Kenya Tea Statistics 2013 -2017, Tea Directorate.

adopting to traditional tea consumption, purple, green and instant teas as well as herbal infusions are becoming a hit with the young people.

## 3.2.7 Support Organisations

Apart from the players explained above other organisations are supporting the tea industry which include;

- Certification bodies: Fairtrade, Rainforest Alliance, UTZ Foundation;
- Certification audit firms: Africert, CERES, FLO Certification and RA Certification;
- NGOs: ETP, GIZ, ITC, Solidaridad, VI Agroforestry, Woods Family Trust.

# 3.3 Strengths and Challenges in the Value Chain

## 3.3.1 Strengths and Advantages

#### 3.3.1.1 Regional level

The major strength of the tea industry at the region level is the year-round supply compared to other auction centres which have seasonal supply. Major changes in supply volumes in other auction centres affect the price in Mombasa and vice versa. This enables buyers to meet their quantity demands at any time of the year. They are also assured of meeting their blending requirements, hence offering a consistent final product to the consumers. Another strength is the constant supply of tea of different qualities from different countries: very high quality of Rwandan and Kenya teas, medium and low quality from other countries. The Mombasa Auction is the biggest auction by volume and yet in most auctions all the tea is bought, out lots are minimum, highest being at 20%, during seasons of high production. This assures buyers of variety of teas that can make their own blends. High quality teas are used in the blends to promote lower quality teas. Buyers can therefore, meet the different needs of their customers in different parts of the world. A complementing strength is the high level of traceability of the tea sold at the auction and through direct sales. In the Auction traceability is ensured by giving every lot of tea a unique lot number which starts at the beginning of the year. At the factory, every lot receives an invoice number that runs annually. Teas are also identified by their garden name, country of origin, grade and year of manufacture and all this information is imprinted on each package of a lot and on the brokers selling catalogue. Though the tea is predominantly black CTC, there is a move to produce speciality teas.

Another strength is the well-coordinated supply chain that helps reducing costs, improve efficiency and provide better customer services. Teas are only printed on selling catalogues when they have arrived in a registered warehouse and confirmed through documentation. This helps to effectively coordinate production labour and schedules, the inventory process, efficiently stocking and retrieval teas and hence, buyers can quickly and efficiently take orders and ship teas after auction. With such efficiency there is no idle or extra labour, lost sales and unhappy overseas customers. Another strength is the mutual trust that has been created in the tea trade. The business thrives on mutual trust to meet commitments, even though EATTA is there to ensure compliance and it can enforce punitive measures to address unmet commitments. This mutual trust has been created over a long time and continues to endure.

Yet another strength is the good and improving infrastructure at the port city of the auction centre, Mombasa. There are many advantages of finding all required trading facilities within one place. Such facilities include, warehouses, transportation facilities, tea blending facilities, packing facilities, supplies of needed materials and the port, not to forget skilled and experienced labour. The port is sited in a good location for shipment of tea in to all parts of the world. further all major shipping lines have a presence in Mombasa.

The business is overall transparent. In fact, after the Auction, buyers are required to pay for the tea within two weeks and collect the tea only after payment in full. If the buyer fails to pay, which is a rare occurrence, the broker is required to pay for the tea; to ensure this, brokers have a bank guarantee.

Another strength of the region's tea is that it is grown without the application of agro chemicals except for inorganic fertilizer. Contemporary societies are more conscious of the overall benefits of consuming tea and its extracts and also as a beverage. Although little research has been made on the effects of tea on health, it is thought there is huge potential to discover more benefits of tea like in medicine, beauty and long live. Another advantage is that tea remains one of the cheapest products compared to other beverages whose prices have increased by folds. It is also a beverage for all people regardless of age, location, season and time of day.

Additionally, the majority of the activities of growing and processing are carried out in rural areas and are labour intensive, leading to wealth creation, prevention rural – urban migration, promotion of light industries, improvement of infrastructure and social amenities.

#### 3.3.1.2 Kenya

The main strength of Kenyan tea is that it is high-grown and hence of superior and consistent quality. Due to this the teas are often used for blending purposes to upgrade the quality of other teas. There is high productivity in the farms, both for estates and smallholders, and high efficiency and capacity in the tea processing factories. Within the high quality bracket, there are different quality categories, which gives buyers a wide choice for their blends. Another advantage is that the tea industry in the country is big and well organised. The country can count on over 140 tea processing factories producing over 450 metric tons, which accounts for over 70% of the total sales in the auction. Over half of the tea production is done by indigenous smallholder farmers, who own their factories by shareholding, which gives loyalty to the factories and confidence of continuity. Farmers are regularly paid for the green leaf and the payment rate is high, at 70 – 75 % of the net sales value. The unique model of managing large number of smallholder farmers through KTDA is a major strength, resulting in economies of scale, efficiency and high-quality of the tea made.

The tea factories in the country have modern and advanced machinery that is manned by qualified, skilled personal, which ensures constant quality all year round. Moreover, the country benefits from having the Mombasa Auction internally, which entails that domestic teas do not need to cross borders before being sold. All brokers and most buyers are based in the country and are able to support the factories in improving and sustaining tea quality.

All the tea producers and factories have been certified in one or multiple voluntary schemes such as Fairtrade, Rainforest Alliance and UTZ Certified. On top of this, most factories are certified on quality management system, based on ISO 9001 and food safety management system based on ISO 22000 and HACCP principles. There is good infrastructure support for the tea industry for logistics of transportation of tea. The tea industry in Kenya is fully privatized, which makes it competitive and efficient, but is also well regulated through AFA TD to ensure level playing ground.

#### 3.3.1.3 Tanzania

The major strength of Tanzania as a tea producing country is the vast unexploited land that is suitable for tea growing and hence available for expansion. In other countries, like neighbouring Kenva, there is hardly any land space left for tea expansion. Tanzania has large swathes of arable agricultural land that are suitable for tea production. The government and development partners such as WFTA, DfID and IDH have come up with interventions to increase the hectare of tea growing by smallholder farmers. The country has undergone successful change of governments, without the violence that too often accompanies elections in other African countries, which makes it politically stable and it attracts investors. Another strength is that there is a high potential for value addition. The country has stable supply of electricity in potential tea growing areas for factories. There is major infrastructure development by government and development partners and by now most trunk and main roads are tarmac and movement is secure. In addition, Tanzania has vast forests, which means that the cost of thermal energy is not high. The government has selected tea as a strategic/priority crop together with coffee and cotton in one group and oil palm, cashew nuts and tobacco in another group. This gives tea cultivation political support. Two deputy ministers were appointed, one for each group of strategic crops. The government is giving its support to tea cultivation, especially in the development of smallholder farmers. It has opened room for PPPs in tea production and processing, in existing and new areas such as Tarime.

Tea factories and farmer's associations give inputs to smallholder farmers on credit that is not charged with interest. The payment to farmers for green is centrally determined by the stakeholders annually in a transparent researched manner. On top of this factories give quality bonuses, which is normally quarterly and a second annual payment based on the performance of

the factory. The country produces medium good quality tea that has not been exposed and appreciated by the market yet, due to inconsistency in quality.

#### 3.3.1.4 Burundi

The major strength of the tea industry in Burundi is that it is a relatively small industry and mainly controlled by the government, which ensures the monitoring of quality. Tea is grown in high altitude areas of 2140 – 2280 Meters Above Sea Level (masl) and it is pesticide free as there is no application of agro chemicals other than inorganic fertilizer. All farmers, estates and factories are RA certified. Burundi teas are classified in the auction at the medium and good medium categories and fetches prices next to Kenya. The entry of a private players in the industry would create competitiveness and internal demand for quality.

# CHAPTER 4: CONSTRAINTS AND CHALLENGES

# 4.1 Regional Level

The tea industry in the region is constrained by multiple challenges. The major challenge is the large quantity of tea offered to a single market window in bulk. The region accounts for over 30% of the global exported tea and 70% of the tea is sold through the Mombasa Auction, which is the largest tea auction centre in the world. Though most of the tea is absorbed, the prices realised are relatively low compared to the quality of the tea, considering that producers in the region practice fine plucking of green leaf, mainly with the cutting of two leaves and bud, which leads to high quality tea, free of pesticides, unlike teas from other regions. Since tea growing is rain fed, there is high variation in volumes produced and offered in the market between different seasons: very high volumes during rainy season and low volumes during dry seasons. During the high growing season, the out lot of tea is high, which means delay in the producers getting return on their investment.

Another challenge is that a substantial proportion of the tea is of lower quality, which is not traceable, and it tends to pull the prices downwards. Teas from the region are generally known to be of high-quality and are used for blending other teas; however, within this description, there are teas of different quality categories: *high* - few Rwandan and KTDA (especially East of Rift Valley) gardens, *medium* - other Kenyan & Rwanda gardens and Burundi teas, and *low* - from other countries. On top of this, the teas of lower quality have inconsistencies in quality, due to uneven control of quality processing parameters and overcapacity in processing factories during high growing seasons, which creates an overall lack of confidence in the buyers.

Another challenge is that even though the quantity of tea is high throughout the years, there are seasonal variations in quality due to changing growing conditions and variations in quantities. During wet seasons, tea growth is fast which alters chemical composition and leads to lower quality, the high quantities over stretches the processing capacity of the factories, leading to lower quality. There are also problems of green leaf collection logistics due to destruction of road infrastructure by heavy rains, causing delays and reduction of green leaf quality.

Moreover, world tea process are unstable due to irregular supply. Since tea is an internationally traded commodity, prices are determined by factors of supply and demand. However, in time of declining quantities, prices lag in responding. Due to the manual nature of trading on the auction floor, the auction takes too long during periods of high quantities, players become fatigued and this affects trading. During high seasons other infrastructural components, such as warehouse space, are overstretched and limited.

Another issue is the continued dollar sanctions to Iran by USA, which used to be a major tea buyer in the auction. Such sanctions exclude medicines and food, but they apply to tea. A major threat to the EA regional market is that the supply is growing faster than demand, hence players are just competing among themselves. The industry is highly volatile to the political situations of the supply and market countries.

Different players in the value chain expressed challenges at their level as summarized below:

#### Warehouses:

- Stringent Government trading regulations and procedures especially on the handling of foreign tea;
- Costly warehousing and tea handling infrastructure requirement by the producers, buyers and final consumers;
- Unavailability of adequate food grade warehouses space in Mombasa. Most warehouses have Asbestos roofing, which has been condemned by food safety standards. However, companies have found it difficult to replace the roof.

#### Brokers:

 Individual competition, selling tea on credit to overseas buyers by the local tea buyers, pushing others out of business. The broker ends up paying for the tea and selling it at lower prices. It was reported that there is undercutting by tea buyers, as large buyers offer long credit periods of up to 120 days, which small buyers cannot afford making them unable to pay for teas bid at the auction, and hence brokers have to pay for the tea at the prompt date in accordance to the rules of trading by EATTA;

- Short prompt date of ten days after the auction, yet buyers require longer credit period;
- Taxation of tea entering the country from other countries;
- High withdrawals during auction. During periods of high volume, some teas do not fetch the reserve price of the producer and are not sold; these are re-printed for the auction after three weeks, which requires the broker to distribute more samples;
- High volumes of tea are sold through the direct sales window;
- Poor road infrastructure leading to delay of the tea's arrival to the warehouse and delay in printing the catalogue;
- Delays of tea from other countries at the border points;
- Inadequate warehousing facilities to accommodate all the tea during high production seasons.

#### Tea Buyers/Exporters:

- Shortage of foreign currency, as tea is bought in US dollars;
- External factors beyond the control of the buyers such as pirates, terrorists, conmen, sanctions and delays at border points;
- Demand of high credit for long periods by the buyers and packers overseas. The prompt date for tea buyers is ten days after the fall of the hammer in the auction, yet most overseas buyers demand credit for 30 – 45 days and some up to 120 days; this calls for high working capital, which is expensive to the tea buyers in the auction;
- High cost of credit from local banks;
- Restrictions in the export markets, including moisture content, MRL, GMP, high duties, long clearance processes, high cost of compliance and quality assurance;
- Limited market outlets, where consumption is steady or declining. The first five destinations are UK, Pakistan, Egypt, which account for over 80% of the sales;
- Difficulty to open new markets, for example in West Africa, due to lack of coordinated support by governments as well as the presence of trade and non-trade barriers by major players already in the market;
- Dynamicity of the market: every market destination is different and has to be handled differently with unique strategies;
- Lack of bilateral agreements and balance of trade, e.g. with China, and restrictive practices;
- Demand by the major international retailers and supermarkets for the buyers to promote the tea on the selves within their premises and refresh the stocks, a difficult exercise for Kenya based companies;
- Expense of participating to exhibitions and trade fairs to promote the tea from the region;
- Lack of mechanisms to ensure payment of tea delivered to overseas buyers and packers, for example, through the Ministry of Foreign Affairs, embassies and diplomatic offices. In some instances tea buyers/exporters have lost money after tea has been delivered;
- High cost for value addition due to high cost and unavailability of quality packing materials, lack of government support for example in lowering duty for packaging materials and promoting tea through the embassies overseas;
- High rejections and claims for compensation, putting the sellers/exporters (buyers at the auction) at the mercy of buyers overseas;
- Many government taxes on tea and packaging materials, accounting for 25 30 KES per kg;
- Poor regulation, for example, licensing of factories without raw material, leading to cut throat completion for green leaf and lowering quality of made tea;
- Communication barrier, for example selling tea to Arabic countries, which requires the services of a translator;
- Low tea consumption due to competition with other beverages;
- Very high variable costs, including labour, energy, tax on tax, certifications, licences, transportation.

#### MSME Buyers/Exporters:

In Kenya, the MSME industry is defined by the number of workers the turnover and assets of the enterprises.<sup>15</sup> According to Kenya's Micro and Small Enterprises Act 2012, micro enterprises are defined as firms, trades, services, industries or business activities whose annual turnover does not exceed Kshs. 500,000 and whose total employees are less than ten people. The same statute defined a small enterprise as that which has an annual turnover of between Kshs0.5 - 5 million, with the number of employees in the range from 10-50 people. In essence, the law classifies these enterprises based on employment and annual turnover.

The constraints and challenges recorded by MSMEs in the tea sector were the following:

- Curtailed potential to grow or enter new markets due to unfair competition by big buyers, who can reduce their prices up to 30%. Yet some traditional markets even support their suppliers with advances;
- Limited access to already established mature markets due to protection by established exporters. This means that they are relegated to new markets that are expensive to enter and where there are risks of losing money;
- Demand for quality tea at low prices, while the price of high quality tea at the Auction is high;
- High squeeze by the demand for long credit periods as they do not have adequate resources;
- Low domestic consumption;
- Lack of affirmative support by governments, such as facilitating access to low interest credit, access to low cost/high quality packing materials by lower import duty, lower taxation or relief on domestic tea market, access to export market, and offering export compensation guarantees;
- Companies are starting and closing within short time, hence losing investment opportunities;
- High expense of purchasing blending and packing equipment;
- Lack of access to finance, as banks require letters of credit, order or collateral, which SME may not have.

The constraints and challenges found were similar to that reported by the Kenya Institute of Management (KIM) to AFA TD.<sup>16</sup>

#### Speciality Tea Packers/Exporters:

- Markets for the purple and specialty tea are not well defined and each packer looks for their own market;
- There is no standard definition of speciality teas and no standardisation of processes and parameters to ensure standard products that can be sold throughout the auction. Instead each processor makes its tea according to the specific requirements of its buyers and yet the buyers are not able to absorb all the resulting tea grades;
- Requirements by AFA TD of maintaining a high minimum price for the tea to be labelled specialty tea. This has been set to prevent speciality manufacturers from processing bulk CTC black tea, defeating the policy of diversification of tea products;
- Low funding for the association which cannot appoint a secretariat committed to manage affairs of the association. It is currently managed through the voluntary services of the officials when they have time;
- Capacity constraints on the personnel within value chain, limited knowledge, skills and experience in processing, quality control and tasting evaluation of speciality teas;
- No code of conduct to guide the members;
- Lack of access to finance.

<sup>&</sup>lt;sup>15</sup> State of Implementation of the Micro and Small Enterprises Act 2012; Institute of Economic Affairs.

<sup>&</sup>lt;sup>16</sup> Capacity Gaps Assessment Report for Tea Trade SME's in Kenya; Kenya Institute of Management, 2016

# **4.2 Country Level**

# 4.2.1 Kenya

The main challenges in the tea value chain at the production and processing stages include:

- Small pieces of land for smallholder farmers that are too expensive for tea growing, making farmers disenfranchised. This is worsened by the practice of land sub division to children;
- Management structure of the smallholder tea factories is characterised by board members that only care for the short-term performance of the factories and payment of the farmers, rather than growth and sustenance of the business. This makes decisionmaking long and unprofessional. For example, all surpluses are paid to farmers, leaving no funds for investments and for bad performing years, meaning that loans are necessary for every investment;
- Inadequate plucking labour, especially during high crop peak periods. This has forced some producers especially in the plantations, to use plucking machines leading to lower quality of tea. Mechanization may not be feasible for smallholder farmers with very small parcels of land;
- Licensing of processing factories with low material base (limited green leaf supply), leads to unfair competition for the green leaf available, and factories accept low quality green leaf, leading to lower quality of the tea made. While capacity could be limited during high crop season, in the low period, there are idle facilities: motor vehicles, machinery and labour;
- Stagnant markets and prices against rising costs of production, due to increasing prices of inputs such as fertilizers and labour, lead to income that is below the living wage for farmers;
- Lack of clarity on the different functions of the national government through AFA TD and the county governments. While agriculture is a function devolved to the county governments, the national government is responsible for marketing of strategic crops such as tea;
- Threat of termination of leaseholds for multinational companies of the land producing tea coming from county governments;
- Poor infrastructure in the factory catchment, especially roads and bridges, making some areas inaccessible and leading to delays in green leaf collection at the factory. This leads to loss of green leaf already harvested and lowering of quality function;
- Poor basic facilities for farmers; poor access to water, electricity, schools and health facilities;
- Climate change, unpredictability in weather and seasons leading to difficult forecasting for undertaking farm activities;
- Generational change is problematic in the change of tea cultivation from seniors to the younger generation, who wants to run things in a different way including quick turnarounds and use of technology.

## 4.2.2 Tanzania

- Climate change is causing decreased productivity, production and higher requirements for inputs such as water for irrigation. In the main tea growing zone in the South, the rainfall pattern is unimodal, entailing a long period of six months without rainfall. Therefore, 70 – 80 % of the total annual crop s received in the six wet months. This has led to change in bush establishment practices to encourage deep root development;
- Problem of sizing capacity of factories as during high crop season processing facilities are overstretched and during low production, facilities lay idle. In some areas, farmers have to pluck green leaf on alternative days to match the factory capacity and run satellite factories that only operate during high crop period. This is worsened by ageing inefficient machinery in factories;
- Imposition of taxes and levies for tea at the auction, high transport and associated costs
  of tea to the auction, many requirements for border clearance during tea transport to the

auction such certificate of origin, export permit, phytosanitary (SPS) certificate, fumigation certificate make the process highly complex;

- Illegally imported tea including teas from other countries, which are brought and distributed in the country without the approval of TBT;
- Inadequate government tea extension services, which are given through general agricultural officers, but are not effective. Currently, they are being offered through farmer's associations instead;
- High cost of inputs such as fertilizers due to low economies of scale as farmers are few and expansively spread in the country;
- High cost of certification and small purchases of certified tea, that would attract premium and/or high prices. Due to this most factories have stopped continuing with Fairtrade certification for smallholder farmers;
- Low prices of tea at the auction. The country's teas are put in the category of plainer and lower mediums. National country players perceive it as unfair and argue their tea has even better quality than that from Malawi and Burundi, and due to this the country is planning to start an auction centre in Dar es Salaam. As a countermeasure more tea is sold through the direct sales window, although the price at the window is based on the auction price plus a premium;
- Smallholder farmers are organised in associations that have not been found to be effective in serving farmers. Instead they have been used to enrich the leaders and being used as political spring boards;
- Inadequate extension staff for smallholder farmers and the few available are not well trained, experienced or specialized in tea husbandry;
- Inadequate and high-cost plucking labour for estates, which have adopted mechanization, thus lowering the quality of tea. This process is not feasible for smallholder farmers. The mechanisation of tea plucking appeals to youth, who has had access to secondary schools thanks to the improvement of the transition from primary education. Due to this young generations are not keen to performing manual tea plucking;
- Limited research on tea due to limited funding. TRIT is funded by the tea industry players and the government through secondment of senior staff;
- Low returns especially for smallholder farmers due to low prices of made tea in the market and high cost of inputs;
- Most tea growing areas experience unimodal type of rainfall, which is very heavy and over a short period of time. Due to porous soils, this results in high leaching of nutrients, hence the need for high rate of application of fertilizers to replenish;
- The bushes are old and hence the seedling variety is not of the newest improved type. This leads to low productivity and quality especially in estates;
- Erratic and unreliable power supply especially during rainfall, leads to high cost and lower quality. This is exacerbated by government policy that does not allow private investors to venture in to power generation for their use to lower cost of energy;
- Limitation to set blending and packing facilities in the processing factories for value addition and product diversification to improve on income and returns;
- Governmental taxes, for example alternative tax of 0.3% on turnover that is imposed on any company that continues to make losses for over three years and withholding taxes for foreign funds. This discourages investments with high capitals. It takes at least six years to achieve tea maturity, but agribusiness is measured with the same yardstick as other businesses, without appreciating other social impacts like creating employment and wealth in rural areas, unlike in other tea growing countries;
- Smallholder tea sold as the mark of the factory is combined with estate green leaf. Due to this, any quality effort and achievement by farmers is lost in the blend. Stringent quality requirements on smallholder farmers by factories do not translate in better payments for green leaves.

## 4.2.3 Burundi

- Low national production that has been stable for a long period;
- Low productivity at the farm level, leading to low returns for farmers. This discourages farmers to invest in tea production and adopt good agricultural practices;
- Low quality, as Burundi's tea is put at the medium and good medium quality, hence fetching low prices;
- Inconsistent quality due to green leaf overshooting processing capacity and inconsistent control of processing parameters;

- Limited knowledge and lack of exposure of staff in the field and in factories. Most knowledge passed through brokers visiting factories and rare training events;
- Poor infrastructure within the factory catchments, delay in green leaf reaching the factory leading to loss and lowering of quality;
- Unstable power supply to the factories leading to frequent power interruptions which lead to lower quality and high costs with use of diesel generators;
- Imposition of taxes and levies for tea at the auction, high transport and associated costs of tea to the auction;
- Lack of research in tea to improve productivity, quality, resistance to pests and disease, tolerance to drought and fast establishment. Outsourcing research to other countries is expensive;
- Large part of the industry is run by government, which is not responsive to business management issues;
- High cost of certification, implementation, auditing and lack of professionals in the country as trainers and auditors come from outside the country.

# CHAPTER 5: OPPORTUNITIES FOR MARKET ACCESS AND DEVELOPMENT

# 5.1 Regional (EATTA) Level

Below is a list of 16 opportunities identified for the region:

- 1. **Education and training**: to professionalize tea business, to be achieved through trainings focusing on:
  - Needs assessments to establish the required skills and identify the existing training gaps for different players in the value chain;
  - Formulate training programs, modules and short courses, development of curriculum based on the needs, tailored material development and establish a training centre and/or link to an institution of higher learning/university;
  - Training and professionalisation of tea tasting for consistent results and tea auctioning;
  - Set a professional body for examination of tea tasters and tea brokers.
- Research and consultancy, to expand the business and funding of EATTA and give better service in information dissemination on markets, market intelligence, forecasting and international business relations;
- Automation of auction and processes: EATTA is currently working on automation of auction (E-Auction) to reduce costs and auction time. This will require support to maintain the system as well as to automate other processes;
- 4. **Marketing and product development**: support the exploration of new markets, attend trade fairs, exhibitions to support efforts of regulators, organise buyers' visits to producers at the farm level to help them better understand production;
- Support to SMEs: set a specific program to support SMEs (independent tea factories, packers, exporters and firms offering services to the industry) in capacity building, business planning, linking to finance, business solutions and finance. Establish a Common User Blending and Packaging Unit in Mombasa;
- 6. Research and promotion of speciality tea: this includes CTC green, Orthodox black & green, Organic, Purple, White and others. A study is needed to assess the quantities available and potential, processes, standards, markets and feasibility of establishing an auction for speciality tea. This shall be monthly at the beginning and the frequency shall increase as the volumes and demand increase. Define standards of specialty teas and processing procedures. Set up an Incubation Center to promote processing of new purple and specialty tea;
- Rationalisation of trade standards in EAC: this would entail the removal of barriers of entry and delays at the borders as well as the harmonisation of East Africa Standards (EAS);
- 8. Set futures market to improve on predictability of tea prices;
- 9. **Creation of a free trade area for Africa** by removing tariffs, quotas and trade and nontrade barriers between countries in the Eastern, Central and Southern Africa regions, where tea is grown, with other regions, Northern and Western, who are currently buying their tea from outside the continent;
- 10. **Creation of level playing ground** and ensure all actors accept and abide by the EATTA rules and policies to prevent undercutting and allow SMEs to thrive. Publish and disseminate clear procedures for buying, selling, clearing and shipping;
- 11. Harmonisation of the implementation of multiple voluntary certification standards (VSC) (Fairtrade, Rainforest/UTZ and others) to minimize time, efforts and costs, for example by combined auditing through multi skilled auditors;
- 12. **Development of a curriculum for training on tea processing** through the establishment of training materials (manuals) and the undertaking of training for processing staff and learning/ exchange visits;
- 13. **Development of quality parameters and motoring guidelines** and undertake quality improvement audits;
- 14. **Promotion of tea drinking** locally and as a healthy behaviour by making it readily available and easily accessible in quality, form and price. For example, through dispensers in supermarkets, convenience stores, filling stations, hospitals, airports and other public places;

15. **Establishment of a EU - based tea logistics hub**, whereby full containers could be shipped and the tea could be stored for sale within the EU market, particularly beneficial to target speciality tea customers, many of which are boutique tea rooms, stores or brands. This would enable lower shipping costs, therefore lower overall customer cost and the added benefit of having regional tea readily available in this market.

# 5.2 At Country Level

## 5.2.1 Kenya

- Value chain analysis on returns to show the distribution of income along the value chain. This would allow the identification of a distribution that could facilitate fair remuneration of smallholder farmers, entailing an income that can sustain livelihoods and improve labour conditions and welfare of workers.
- Cost benefit analysis of certifications weighting the costs of implementation, auditing and maintaining certification against social, environmental and economic benefits and if market is compensating certification;
- Review of tea regulations through stakeholders' participation to align them on the current situation of the industry;
- Strict adherence to regulations to prevent hawking and side selling of green leaf and illegal importation of inferior quality teas;
- **Promotion of tea consumption** locally for both black and specialty tea.

# 5.2.2 Tanzania

- Government's objective to increase the value of tea and double national production to over 70,000 million kg in the next five years. This will be achieved through:
  - Increase productivity of smallholder farmers from 800 to over 1,000 kgs made tea per ha;
  - Expand the area under cultivation from 22,000 ha to over 30,000 ha, especially for smallholder farmers;
  - Higher production from tea estates;
  - Intensify of infilling to reduce gaps in tea fields from current estimated 30%;
  - Improve management of Jamaa (communal) farms to increase yields through leasing or contracting;
  - Expand and improvement of factory capacity from current 65,000 million kgs to over 70,000 million kg, and attract investors to put up new factories with joint ownership (50%) with smallholder farmers;
  - Increase value of tea by improving quality category from lower medium to good medium level with average price of 2.2 – 2.5 USD/kg and introducing production of speciality teas – there has been enquiry from a packer in Germany.
- Promotion of domestic tea for buyers to appreciate the quality and establish auction centre in Dar es Salaam;
- Approval and use of warehouses in Dar es Salaam to store and auction the teas in Mombasa, in order to reduce cost of transportation;
- Modernisation of factory processing machineries to improve efficiency, lower cost of production, get consistency of quality, improve quality;
- Promotion of research on planting materials on high productivity, high quality, faster establishment, resistance to pests and diseases and tolerance to drought, to address climate change impacts. In addition, research on factory processing to improve high productivity and high efficiency and processing specialty teas;
- Promotion of tea consumption locally, both black and specialty tea.

## 5.2.3 Burundi

- Privatisation of tea industry to attract more players and investment to the sector;
- Modernisation of factory processing machineries to improve efficiency, lower costs of production, improve quality and its consistency;
- **Capacity building** of agriculture and factory processing staff and visits to other countries;
- Expansion processing of specialty tea and value addition of black CTC tea;
- Establishment of tea research facilities in the country;
- Harmonisation of the implementation of VSCs to minimize time and effort spent and costs. Universal auditing and auditors;
- Promotion of tea consumption at local market, both black and specialty tea;
- Opening up of regional markets such as DRC which is a huge potential market through bulk or value added tea products.

# **5.3 At Industry Level**

#### Warehouses:

- Increase packages of services, such as contract blending and packing, for SMEs and independent factories. This would include contract blending and packing, sampling, free storage;
- Diversification of products to other neutral commodities that have no effect on quality and wholesomeness of tea, such as sugar, to improve on cash flow and offer better services;
- Adoption of new and modern technology stacking systems with barcodes to increase storage space, improve traceability and give fast efficient services, upwards;
- Utilisation of storage in dry ports: due to limited space and high costs for more constructions in Mombasa, open and increase storage space at dry ports, such as Nairobi and Naivasha, with assurance of true sampling and delivery of tea after auction.

#### Tea Brokers:

- Development of specialised service package for SMEs such as tasting and advice on blends at friendly costs;
- Promotion of SMEs and specialty tea locally and abroad;
- Free inspection visits to independent and cottage factories.

#### **Buyers/Exporters:**

- **Promotion to non-traditional markets** such as Russia, China and Japan, West Africa, Qatar;
- Increase proportion of tea that is exported in value added form, such as small pack sizes for placing on shelves of destination supermarkets and improve quality of packaging materials and reduce duty to lower price;
- **Promotion of new tea products** such as tea extracts, for which new market penetration strategies will be required;
- Promotion of the mark of origin to retain the superior quality of tea. In fact, currently
  the quality of tea is lost in blending after auction;
- Adoption of a collective approach when lobbying governments for the removal of trade and non-trade barriers, convince county governments to remove levies and ask banks for low interest credits and friendly financial products;
- Adoption for a code of conduct on the business and regulations on auctions, to be observed by all the players for smooth running of the trade;
- Organisation of missions to buying countries and bring buyers to visit producers and advice on quality needed;
- Creation of specialised programs by the TBA to support MSMEs with EATTA and AFA TD;

- **Creation of a program targeted at helping and empowering MSMEs** addressing capacity building, access to services and information (markets, adaptable technology solutions and finance at low interest).

#### Packers:

- Improvement of quality of packages and labelling to disseminate favourable information on tea, meet international requirements and remove queries;
- Value addition of black CTC tea and shift from bulk selling in the auction and offer teas in small pack sizes to supermarkets in destination markets;
- Product diversification from black CTC tea to other types of tea such as orthodox black as well as CTC and orthodox green and purple tea, and white tea, herbal tea infusions and other tea products for both domestic and export markets;
- Contract packaging and joint ventures in packaging of tea at the destination countries;
- Merging packaging operations and marketing promotions to enjoy economies of scale and improve on returns;
- Participation in international trade fairs, exhibitions and conferences to promote tea and tea products;
- Direct purchases from auction and from processing factories to narrow value chain and increase on returns and price to producers;
- Implementation of quality improvement practices, quality and food safety management systems and VSC programs to ensure quality assurance, compliance and exposure.

#### MSMEs:

- Affordable financing packages;
- **Exposure** and networking forums;
- Support in business planning, pricing mechanism, promotion to increase awareness and consumption locally and abroad;
- Access to machinery and technology solutions at affordable prices and friendly financing options;
- **Capacity building** in marketing and product development;
- Establishment of a common user facility that can be used by SMEs, instead of each buying their own small inefficient machinery;
- Development of a profile of MSMEs (on turnover, years of operation, number of employees, management/governance and ownership), register and support package to reach markets.

#### Specialty Packers/Exporters

- Promotion of health benefits of purple tea, stressing the high content of anthocyanin for fighting free radicals in the body and further research to demonstrate and publish the health benefits;
- Expansion of knowledge and establishment of standards, nomenclatures, good manufacturing standards, guidance (code of practice) and certification for speciality tea products. Inspiration for these could be drawn from other advanced countries, such as Sri Lanka;
- Produce studies on the market needs for high value markets such as Japan, Russia, USA and EU to develop products that meet those needs;
- Affirmative government support to establish standards, get machinery and inputs and penetrate market;
- Lobby buyers to pay SMEs upfront or open Letters of Credit;
- Improvement of infrastructures at the trade level (Mombasa) for efficient services;
- Update of machinery to the trial factory at TRI, Kericho for speciality tea products development and refining.

# **5.4 Concrete Opportunities for the Programme**

Through TISIs:

- **Assistance for the funding and the support** the opportunities at the regional, national and industry levels;

- Organisation of benchmarking visits for MSMEs and speciality tea marketing staff to tea producing and consuming countries;
- Capacity building of staff of the regional business support organisations (TISIs) such as EATTA, TWA, TBA, Tea Packers Association (TPA), on the key roles and in marketing and access to finance;
- Capacity building of staff of the national and industry business support organisations (TISIs): AFA TD, TBT, OTB, KTDA, KTGA, TAT, TRI, TRIT, P&STA, MSTA on the key roles and in marketing and access to finance;
- Establishment of capacity of the regional, national and industry TISIs to offer better services to members, particularly for new TISIs such as P&STA and MSTA;
- Capacity building of regional, national and industry TISIs thanks to ITC's online market tools such as: Sustainability Map, Trade Map, market Access Map, Investment Map and Procurement Map;
- Promotion of tea in the international tea markets through sponsorship to trade fairs, exhibitions, conferences, missions, visits leading to the creation of new strategies for penetration to new markets, market intelligence;
- Promotion of specialty tea in the international markets through trade fairs and exhibitions;
- Provision of support to rationalize trade regulations within the region and in the destination markets, removal restrictions, trade and non-trade barriers and reduce delays at borders;
- **Support in setting standards, nomenclature and procedures** for manufacture and advancing research on specialty teas at the processing level;
- **Promotion to regional market such as DRC**, which is a huge potential market especially for Burundi, through bulk or value added tea products;
- Focus on tea traceability and other compliance requirements for market access;
- Support in conducting feasibility of establishment of a EU based tea logistics hub;
- Facilitation of the obtainment of technical capability required to set up a tea extract plant. Most of the extraction plants are based within consuming regions such as USA and Japan, but what would be required to set something up locally, also in a joint venture.

#### Directly to MSMEs:

- Capacity building in business planning, marketing, market penetration, product development, management, access to finance, financial management and quality control;
- Capacity building in standards, nomenclature and procedures for manufacture on specialty teas;
- **Creation of linkages and networking** to financial providers, technology, machinery supplies and markets;
- **Support in promotional tours and display booths** to trade fairs, exhibitions and conferences in market countries;
- Support with getting and managing shelve spaces with major brands and supermarkets in market countries;
- Provision of market intelligence and capacity building on ITC online market tools; Sustainability Map, Trade Map, market Access Map, Investment Map and Procurement Map;
- Tangible results even it is for 2-5 specialty tea companies, which would create success stories and encourage tea sector to venture into new innovations for diversification and market access.

# CHAPTER 6: BENCHMARKS FOR RESOURCE EFFICIENCY OF TEA FACTORIES

# 6.1 Kenya

A total of nine tea organisations were visited in five counties, and they included two multinational companies, six medium size estate/independent factories and a government owned factory. The list of factories visited is shown in Appendix 12.

None of the factories could provide the resource data at the time of visit and thereafter took long periods to send the data. For some factories, the energy data was already available as it was the same data required for entry in to the Annual Energy Awards Competition, run by KAM, of which they were part.

From the data collected on resources utilised in factory processes, it was found that:

- Almost all the factories have recorded data on resource inputs utilized in the process, as they have become requirements for VSCs they subscribed to;
- There is a very high variation in the utilisation efficiency of inputs in tea manufacturing process, demonstrating an opportunity for interventions to improve efficiency for factories at lower levels;
- Costs associated with utilisation of inputs differ across factories. The main costs include:
  - Electricity: tariffs including fees for kwh and KVA demand unit consumption, government taxes and levies as charged by monthly bills by the main grid service provider, Kenya Power and Lighting Company (KPLC) limited and costs of generator;
  - Steam generation: cost of purchasing firewood, transportation from the field to the factory, labour used in billeting and stacking of firewood in the factory, transportation within factory and labour for feeding the boilers. Factories with their own woodlots use either the cost of production or the market price;
  - **Fuels for generators**: cost of buying the fuels including transportation to the factory based on price and cost of spares and maintenance for the generator;
  - Fuels for green leaf transportation: cost of buying the fuels including transportation to the factory based on price, cost of spares and maintenance for the vehicles and cost of labour for loading the vehicles, and some including that of the driver. Some of the medium and independent factories outsourced green leaf transportation and hence did not record these costs;
  - Water: most factories have their own source in form of rainfall harvesting from roofs of buildings, storage in dams, pumping from river/s and borehole, but they also obtain it from local statutory suppliers. Costs for water from their own source include electricity for pumping, licences, spares and maintenance of pumping, distribution and storage facilities. Costs for water supplied by local authorities include the cost of units consumed based on price and taxes and levies as charged on monthly bills. Since labour is not fully deployed, their costs are charged in other cost centres, for example building maintenance;
  - **Raw materials** as measured by waste generated include costs of labour used in handling and direct costs of disposal;
- Multinational companies have established benchmarks for utilisation indices for their factories and those under their managing agency, while independent factories had no benchmarks and most compare year on year utilisation efficiency;
- Multinational factories have implemented interventions to improve utilisation efficiency of inputs and work to meet the benchmarks, especially for energy, this being the highest cost item in the process. A few independent factories have also implemented interventions with support of development partners and/or a result of requirements of voluntary certifications.

# 6.2 Tanzania

Four tea factories, out of the five targeted, were visited in four districts and in three provinces. The list of factories visited is shown in Appendix 12.

None of the factories could immediately provide the data, as it was not accessible in one source document and they requested to compile and forward it later by email. Only few factories sent the data early upon request, while the others took a longer period.

From the data provided, the following was observed;

- Not all the data was available for the operational year 2018. In some factories, the data for the last month, December, had not been compiled, hence summed data was from December 2017 to November 2018;
- Cost for electricity is only made up of charges by the service provider for units consumed, but there are other cost associated with electricity usage including statutory payments and government taxes and levies;
- Firewood is recorded in Cubic Metres (CBM) and not in kg as indicated in the tool;
- Costs of the diesel generator were based on the cost of purchase only, though there are other associated costs of usage such as transport and labour;
- The cost for water is the sum of all costs including statutory payments and taxes. Moreover, water is counted for all installations, including factory, offices and labour quarters, as there is only one water meter for the installation. However, other costs associated with water usage such as maintenance for the distribution system are not included.

In the Katumba factory it was observed that the energy units (KWH, CBM & Littres) were converted into a common unit equivalent (MJ) and hence, all the energy consumption could be summed up and compared. Such conversion is recommended to enable comparison of energy between different factories and countries.

#### 6.3 Burundi

Two OTB factories and one private factory, of Prothem Usine SA were visited for data collection. However, collecting data for the tool was quite complicated, lengthy and time consuming as the staff of the factories did not have the data organised and hence they had to obtain it one piece after another. Full data could not be collected during the visit and the staff had to compile it and send by email.

An additional challenge was the definition of the data as presented in the collection tool. For example, the Teza factory has its own Mini Hydro Power station, hence it does not pay for power directly. Its posting of electricity cost was therefore zero for every month, yet it is known that money is spent in generating the power. The two OTB factories obtain firewood from their own plantations and hence they do not pay to buy firewood. This also entailed posting the cost of biomass as zero. Similarly, the two OTB factories abstract water from streams, for which they do not pay any tariff, and state their cost of water as zero. There is a need to define which costs should be included in each resource.

Another challenge was that some factories do not take measurements of waste generated, like in the case in Gisozi for all waste and in other two factories for waste other than for tea refuse.

The resource efficiency analysis demonstrated the need for benchmarking of the utilisation efficiency indices and interventions to improve on utilisation, especially for independent and SME factories.

# CHAPTER 7: RECOMMENDATIONS

#### 7.1 Recommendations for Industry

Below are some important recommendations for the tea industry to take into account when addressing the challenges identified in this assessment.

#### 7.1.1 At the Region Level

- Build the internal capacity of the regional TISIs (EATTA and affiliated sub associations; TWA, TBA, TBrA & TPA), so that they can enhance on service industry to the tea industry, with more emphasis on the SME members. Functions that require building of capacity include:
  - Organise green leaf producers, especially smallholder farmers, to achieve high productivity, quality and efficiency;
  - Quality and food safety management in processing;
  - Tea blending, tasting and evaluation;
  - Financial access;
  - Marketing, especially exportation;
- Build capacity and establish a pool of external service providers (consultants) in the themes above to serve the industry;
- Professionalise training in knowledge and skill development on the core functions of the tea industry: production, processing, quality assurance, tea tasting, tea blending and marketing through upgrading modular curriculum (basic/ordinary, advanced and master levels);
- **Develop a regional training centre** with courses on the core functions, offering both onsite and online programs, which can be in partnership with one or several universities;
- Establish bonded warehouses in other ocean ports such as Dar es Salaam, Beira and Maputo and in dry ports such as Nairobi and Naivasha for storage of teas before auction and shipping for export;
- Promote teas regionally, by regional TISIs (EATTA and affiliated associations) buying space in international trade fairs;
- Define nomenclature and standards of specialty teas and with increasing volumes start action of the teas. Set up an Incubation Centre to promote processing of purple and specialty tea;
- Undertake studies to support the health benefits of tea and use information to promote tea.

#### 7.1.2 Country level

- Build the internal capacity of national TISIs (regulators, research institutions, members associations and others), so that they can enhance on service delivery to the tea industry, with more emphasis on the SME members on the core functions as follows:
  - Organising green leaf producers, especially smallholder farmers to achieve high productivity, quality and efficiency;
  - Quality and food safety management in processing;
  - Tea blending, tasting and evaluation;
  - Financial access;
  - Marketing, especially exportation;
- Register individual country marks and promote them globally especially in new markets. The industry should lobby governments to fund and support initiatives from the sector.

#### 7.1.3 By MSMEs

- Consider joint operations in sourcing of tea, blending, packing and marketing to enjoy lower costs due to economies of scale;
- Acquire capacity in the core functions of the industry.

## 7.2 Recommendations for MARKUP to Address

#### 7.2.1 At Regional Level

- Support the regional TISI (EATTA) to disseminate the findings of this sector analysis to the regional trade stakeholders (TISIs), identify recommendations to implement and develop an implementation matrix;
- Capacity building of the regional TISI (EATTA) (board members, management and staff) on capability to offer quality services to members and deliver on her mandate as well as build on quality management, financial access and trade facilitation;
- Support EATTA to build capacity for internal and associate service providers (consultants) on:
  - Quality and food safety management;
  - Tea blending, tasting and evaluation;
  - Financial access;
  - Trade, marketing, export and other relevant courses.

For EATTA to extend support, advisory and audit services to the members (TISIs and MSMEs)

- Support EATTA to develop curriculum & training materials, offer training, administer examinations, and establish a stepwise upgrading & accreditation program for quality service providers;
- Facilitate EATTA to develop a training centre and hub for quality service providers and her membership targeting courses on quality management, tea blending, tasting and evaluation, tea trade (marketing & export), packaging and branding, financial access among others;
- Support EATTA to develop, update and maintain online one-stop shop for trade/export information (portal) with material on export procedures and product and trade requirements of destination markets and/or link to a regional portal for all commodities;
- Support EATTA on **disseminating information to the tea stakeholders** and training them on the utilisation of the online export resource (portal);
- Facilitate study of the market needs for high value and speciality teas in potential markets such as in EU countries, USA, Canada, Japan, Russia and other upcoming markets such as Poland and Brazil.

#### 7.2.2 Country TISIs

- TISIs in tea industry:
  - Burundi: OTB and Prothem;
  - Kenya: AFA TD, TRI, KTDA, KTGA, PSTA and MSTA;
  - Tanzania: TBT, TRIT, TAT, TSHTDA, RSTGA, NOSC and others;
- Support country TISIs to disseminate the findings of this sector analysis to the MSMEs, identify recommendations to implement and develop an implementation matrix;
- **Support country TISIs to build capacity** for internal and associate service providers (consultants) on:
  - Quality and food safety management;
  - Tea blending, tasting and evaluation;
  - Voluntary certification standards VSCs (Fairtrade, RA/UTZ & Organic);
  - Business development;
  - Financial access:
  - Trade; marketing, export;
  - And other relevant courses.

For the TISIs to extend support, advisory and audit services to the MSMEs,

 Capacity building of the country TISIs, (board members, management and staff) on capability to offer quality services to members (MSMEs) on quality management, food safety, tea blending, tasting and evaluation, implementation of VSCs, financial access and trade facilitation,

- Facilitate country TISIs to access resources from the regional TISI, EATTA, such as training materials, training, export portal once they exist, and disseminate to MSMEs;
- For **Burundi**, support to establish tea testing services on quality, chemical composition, safety and phytosanitary requirements such as MRLs;
- For Kenya:
  - Support in setting standards, nomenclature and procedures for manufacture and advancing research on specialty teas at the processing level through AFA TD, TRI and PSTA;
  - Support AFA TD, TRI and KTDA (through packing subsidiary, Kenya Tea Packers Limited (KETEPA)) to formulate Geographical Indicator (GI) for tea.

#### 7.2.3 MSMEs

- Capacity building of relevant MSME staff on:
  - Sourcing and management of raw materials, green leaf, from producers, especially smallholder farmers, as well as ways to organise and facilitate them to increase productivity and quality effectively and efficiently and benefit from their efforts;
  - Good quality processing practices, including quality control, plant and personnel hygiene, waste reduction and management, machinery maintenance;
  - Food safety management and certification;
  - Tea blending, tasting and evaluation;
  - VSCs (Fairtrade, RA/UTZ & Organic) ;
  - Financial access;
  - Trade, marketing and export;
  - Climate change adaptation and mitigation;
  - Efficient utilisation of resources (inputs);
  - And other relevant courses;
- Facilitation of MSMEs on implementation and compliance with:
  - Good manufacturing and management standards;
  - Food safety standards (HACCP, ISO 22000, FSCC 22000);
  - Voluntary certification standards VSCs (Fairtrade, RA/UTZ and Organic);
  - Climate change adaptation strategies;
  - Resource efficiency strategies;
- Support MSMEs in business development, management and export strategies through training, coaching and publication of manuals;
- Support MSMEs in market access through promotional tours, participation and display of products in trade fairs, exhibitions and conferences and with getting and managing shelve spaces with major brands and supermarkets in market countries;
- **Support MSMEs to obtain financial access** by facilitating and working with financial institutions to scheme suitable financing products.

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## APPENDICES

## Appendix 1: Data Collecting Form for BSOs

- 1. Governance;
  - i. Description of the tea industry governance,
  - ii. Government institutions and agencies responsible, their mandate and function,
  - iii. Policies and strategies,
  - iv. Regulatory mechanisms,
  - v. Licensing requirements,
  - vi. List of institutions,
- 2. Production;
  - vii. Major tea producing regions,
  - viii. Tea producers;
    - a. Number of registered producers,
    - b.Total acreage,
      - c. Total capacity,
      - d. Types of tea,
      - e. Total production,
  - ix. Small-scale farmers;
    - i. Farm size,
    - ii. Ownership; (by gender, age bracket, marital etc.),
    - iii. Cropping mix (type of crops and contribution to household income),
  - x. Governance structure,
  - xi. Certifications,
  - xii. List of producers.
- 3. Tea Processing factories;
  - ii. Ownership type,
  - iii. Production capacity; quantity, grades and quality licenced and produced,
  - iv. Market share and positioning,
  - v. Typical machinery used,
  - vi. Staffing structure,
  - vii. Quality controls,
  - viii. Certifications and standards,
  - ix. List of tea factories.
- 4. Performance indices of tea factories in terms of their resource efficiency; water, electricity, firewood, diesel, tea leaves, waste among others.
- 5. Tea Market (Statistics reference local and regional consumption as well international export);
  - a. Trends for production and trade in terms of volume, value and price, type, grade, quality etc.
  - b. Market shares, market positioning (in terms of type or quality of tea produced).

Please provide data for last five years starting with current year.

#### Appendix 2: Data Collecting Form for Associations

- 1. Profile of association;
  - a. Description of the association,
  - b. Membership
  - c. Membership criteria,
  - d. Governance and management structure,
  - e. Source of funding,
- f. Services given to members,
- 2. Production and marketing data for last five years;
  - a. Production per member per grade,
  - b. Sales per member per market outlet per grade,
  - c. Sales price and value by each producer per market outlet per grade,

- 3. Challenges and opportunities
  - a. Challenges constraints,
  - b. Opportunities,
- 4. Support for SMES;
  - a. Does association have a program for supporting A. SMEs? B. Independent factories?
    - i. If yes;
      - 1. How is it managed?
      - 2. Challenges and constraints,
      - 3. Opportunities,
    - ii. If no;
      - 1. is one needed?
      - 2. Are three plans to set one?
      - 3. What has prevented setting one?
      - 4. What support is needed to start such a program?
- 5. Speciality tea;
  - a. How is the association managing speciality tea?
  - b. Members producing speciality tea
  - c. Types of tea produced
- 6. What areas does association need support and how can MARKUP intervene?
- 6 Any other suggestion?
- 7 Provide a list of members.

### Appendix 3: Questionnaire for Qualitative Data Collection

Name of the organisation;

Position of the organisation in the value chain; Producer/Processing Factory/Broker/Buyer/Local-Regional Packer/Exporter

Name, job title and contacts of person responding;

- 1. Describe the international trends of tea demand for East Africa
- 2. What are the purchasing preferences (in terms of quality and grade)?
- 3. Describe the local, regional and international purchasing practices,
- 4. Describe the local consumer trends
- 5. Describe the strengths and advantages in the tea supply chain
- 6. Describe the challenges and constraints in the tea supply chain
- Describe the opportunities in market access, development and value addition for;
   a. Improving compliance with quality and standards requirements
  - b. Increasing value addition
    - i. Packaging
      - Regional level,
      - Country/industry level,
      - MARKUP Project through;
        - Support to regional and national institutions for development of SMEs.
        - Direct support to SMEs
    - ii. Product diversification
- Regional level,

- Country/industry level,
- MARKUP Project through;
  - o Support to regional and national institutions for development of SMEs.
  - Direct support to SMEs
    - iii. Market diversification
- Regional level,
- Country/industry level,
- MARKUP Project through;
  - Support to regional and national institutions for development of SMEs.
  - Direct support to SMEs
  - c. Improving SME export and business capacities
- Regional level,
- Country/industry level,
- MARKUP Project through;
  - Support to regional and national institutions for development of SMEs.
  - Direct support to SMEs
- 8. Give any other suggestions for the MARKUP Project.

## **Appendix 4: List of Organisations Contacted and People Interviewed**

0		Role in Value Chain	Name			
	BURUNDI					
			Jacques Bigirimana			
			Joseph Ndahigeze			
		Government body	Alphonce Nimbona			
1	ОТВ	responsible for regulation, production, processing and	Joseph Gasore			
		marketing of tea	Aloys Kayanzari			
			Amuli Hussein			
	OTB Rwegura Tea Factory		Gérard Niyonizigiye			
2		Processing	Benedict Ruribikiye			
			Gilbert Nderagakura			
			Diendona Karikurudu			
3	OTB Teza Tea Factory	Processing	Célestin Sibomana			
4	Prothem Usine SA	Production and Processing	Samuel Karima			

			Tanguy Hicuburundi
			Jerry Bayanga
5	Prothem Gisonzi Tea Factory	Processing	Jack Habimana
5	FIOLITETTI GISOTIZI TEA FACIOTY	Sammy Gichuki	
	KENYA		
			Anthony Muriithi
			Rosemary Owino
6	AFA TD	Regulator	Samuel Njane
			Willy Mutai
			David Muriuki
7	TRI	Research Institute	Dr. Samson Kamunya
			Dr. Simon Ochanda
	EATTA		Edward Mudibo
8		Regional association	Brian Ngwiri
			John Sudi
			Sophia Nyakio
9	TWA	Association	Dr. Simon Gikanga
10	TBrA	Association	Jacob Kahiu
11	ТВА	Association	Gideon Mugo
12	ТРА	Association	Albert Otochi
13	KTGA	Association	Apollo Kiarie
14	KTDA	Managing Agent	Kanja Thuku
		Wanaging Agone	Vincent Mungiria
15	KTDA; Chai Trading Company Limited	Warehousing and packing	Dr. Simon Gikanga
	Linned		Babala Ratib
			Albert Otochi
16	KETEPA	Packer	Catherine Macharia
17	Eastern Produce Kenya (EPK)	Production and Processing	Dr. Meshack Misoi
			Jonathan Kipruto
18	Siret OEP		Frederick Leting
19	Finlays Tea Company Ltd	Production and Processing	Samuel Kirui
20		Production and Processing	Samuel Thumbi

	Williamson Tea Estates (K) Ltd (WTE)		Angus Nyariki
00	Williamson Tea Estates Itd	Processing	Ishmael Sang
22	(WTE) Changoi Tea Factory		Kimani
			Samuel Kanyumbi
22	Karirana Limited	Production and Processing	Joseph Ngige
			John Nguluu
23	Kaisugu Limited	Production and Processing	Philip Biegon
24	Ngorongo Tea Company	Production and Processing	George Omuga
			Winnie Irungu
25	Maramba Tea Factory	Production and Processing	Isaac Rono
			Allan Muigai
26	Mau MCS	Production and Processing	Jackson Rono
27	NTZDC	Environment Conservation	Charles Mucheke
			Pius Kipkurui
28	NTZDC Kichabo Tea Factory		Joel Maina
29	Prudential Tea Brokers	Broker	Humprey Kinyua
30	Union Tea Brokers	Broker	Jacob Kahiu
31	Venus Tea Brokers	Broker	Charles Kibandi
32	Finlays	Buyer, Packer and Exporter	Gideon Mugo
02			Silvia Riachi
33	Apt Commodities Ltd	Packer	Peter Gitata
34	MTSA	Association	Peter Gitata
35	Ethical Tea Partnership	INGO	Joseph Wagurah
36	RA/UTZ	VSC	Julius Ng'ang'a
	TANZANIA		Michael Orang'i
37		Regulator	Nicholaus Mauya
38	TSHTDA	Association	John Banzi
389	TAT	Association	Jones Sikira
40	TRIT	Research Institution	
40		Research institution	Dr. Emmanual Simbua

41	RTGSA	Production and Logistics	Lebi Hudson
42	NOSC Ltd	Production and Logistics	Flipert Kavia
	Wakulima Tea Company (Katumba Tea Factory)		Andres De Klerk
		Production and Processing	Kambasila Ramadhani
43			Unjile Mwabello
10			Peter Luswema
			Anderson Gitonga
			Peter Msava

# Appendix 5: List of Kenya's Tea Producers

S/No.	PRODUCERS	MARKET SHARE
1	Kenya Tea Development Agency Ltd	55.96%
2	Unilever Tea Kenya Ltd	8.48%
3	Eastern Produce Kenya Ltd	6.59%
4	James Finlay (Kenya) Ltd	5.55%
5	Williamson Tea Kenya Ltd	4.63%
6	Sotik Tea Company Ltd	1.78%
7	Nandi Tea Estates Ltd	1.37%
8	Kipkebe Ltd	1.35%
9	Sotik Highlands Tea Estate	1.22%
10	Mogeni Tea Factory Ltd	1.21%
11	Keritor Tea Company Ltd	1.19%
12	DL Koisagat Tea Estate Ltd	1.12%
13	Karirana Estates Ltd	0.99%
14	Ngorongo Tea Company Ltd	0.98%
15	Kiptagich Tea Estate Ltd	0.97%
16	Kuresoi Tea Factory Ltd	0.94%
17	Maramba Tea Factory Ltd	0.91%
18	Nyayo Tea Zones Development Corporation – Kipchabo	0.85%
19	Kaisugu Ltd	0.78%
20	Kapchebet Tea Factory Ltd	0.76%
21	Emrok Tea Factory (EPZ)	0.67%
22	Mau Tea Multipurpose Co-operative Society Ltd	0.61%
23	Kapcheluch Tea Factory Ltd (Kabianga)	0.58%

24	Elgon Tea and Coffee Limited	0.45%
25	Lasit Tea Factory Limited	0.05%

## **Appendix 6: List of Members of KTGA**

- 1. James Finlay (Kenya) Ltd,
- 2. Williamson Tea K Ltd (Changoi / Lelsa) Estates
- 3. Williamson Tea K Ltd (Tinderet) Estate
- 4. Williamson Tea K Ltd (Kaimosi) Estate
- 5. Kapchorua Tea Ltd
- 6. Sotik Tea Co Ltd
- 7. Sotik Highlands Tea Estates Ltd
- 8. Kaisugu Ltd
- 9. Nandi Tea Estates Ltd
- 10. Kipkebe Ltd
- 11. Karirana Tea Estates Ltd
- 12. Kamiti Tea Ltd
- 13. Kachoroba Tea Estates
- 14. Lyton Tea Estates
- 15. Cianda Estates
- 16. Gakoe Tea Ltd
- 17. Mogusii Farmers Co. Ltd
- 18. Kerumbe Farm
- 2 19. Itibo Estate
- 20. Tea Research Institute of Kenya
- 21. Emrok Tea (EPZ) Factory Ltd

Plant	Plantation Members		Blenders/Packers Members:	
1	Arc Mountains (Ambangulu)	1	Tanzania Tea Packers Ltd	
2	Bombay Burmah Trading Corporation Ltd	2	Kyimbila Tea Packing Ltd. (Chai Tausi)	
3	Unilever Tea Tanzania Limited.	3	Chai Bora Ltd.	
4	East Usambara Tea Co. Ltd.	4	International Food Packers Ltd.	
5	Mufindi Tea Company Ltd.	5	Promasidor (Tanzania) (Pty) Limited	
6	Luponde Tea Estate Ltd.	6	Afri Tea & Blenders Ltd.,(TTB)	
7	Wakulima Tea Company Ltd.	7	M/s. Amir Hamza (T) Ltd.	
8	Kagera Tea Company Ltd.	8	Zanzibar Tea Packers Co. Ltd.	
9	Kisigo Tea Co. Ltd.	9	BK Tea Blenders Co. Ltd.	
10	Ikanga Tea Company Ltd	10	Tanzania Tea Traders Ltd.	
		11	Al- Qayam Venture (T) Ltd.	
		12	Chai Leo Ltd	

## **Appendix 7: List of Tea Producers and Packers in Tanzania**

	13	Rift valley Tea Solutions

Source: TAT

## Appendix 8: List of Tea Producers and Packers in Burundi

Prod	ucer	Factory	Packers	
1	Burundi Tea Office	Buhoro	1	African Tea
	(OTB)	ljenda	2	Golden Tea
		Rwegura	3	OTB
		Teza		
		Tora		
2	Prothem Usine SA	Gisozi		

# Appendix 9: List of EATTA Members

Producer Members		Buyer Members	
A	KENYA	1	Abbas Traders Ltd
1	Chebango EPZ Tea Company Ltd	2	Ace Commodities
2	Chepkumia Tea Factory Co. Ltd	3	Aeon Tea Kenya Ltd
3	DL Koisagat Tea Estate Ltd	4	Afribridge Trade Exporters Ltd
4	Eastern Produce Kenya Ltd	5	Africa Tea and Coffee Company Ltd
5	Elgon Tea and Coffee Limited	6	Afro Teas Ltd
6	Emrok Tea Factory (EPZ)	7	Aimco Enterprises Limited
7	Evergreen Tea Factory Ltd,	8	Akaba Investments Ltd
8	James Finlay (Kenya) Ltd	9	Al Buraq Ltd
9	Kaisugu Ltd	10	AL Khalifa Enterprises Ltd
10	Karirana Estates Ltd	11	Al-Emir Ltd
11	Kibwari Ltd	12	Alibhai Ramji (Msa) Ltd
12	Kipkebe Ltd	13	Al-Itihad Ltd
13	Kapchebet Tea Factory Ltd	14	Apt Commodities Ltd
14	Kapcheluch Tea Factory Ltd	15	Black Dew Ltd
15	Kenya Tea Development Agency Ltd	16	Burale Clearing & Forwading Ltd
16	Kipsigis Highlands Multipurpose Co- operative Society LTd	17	Bryson Tea Limited
17	Kiptagich Tea Estate Ltd	18	Cargill Kenya Ltd
18	Kuresoi Tea Factory Ltd	19	Cemm Traders Ltd
19	Lasit Tea Factory Limited	20	Chai Trading Company Limited
20	Mara Tea Factory (EPZ) Ltd	21	Chamu Supplies
21	Maramba Tea Factory Ltd	22	Cofftea Agencies Ltd

22	Mau Tea Multipurpose Co-operative Society Ltd	23	Cropwell Commodities Ltd
23	Mbogo Valley Tea Factory Ltd	24	Cyrstal Links Ltd
24	Mogeni Tea Factory Ltd	25	Cup of Joe Ltd
25	Nandi Tea Estates Ltd	26	Dafina Tea Traders Ltd
26	Ndarawetta Tea Factory Ltd	27	Devchand Keshavji (Kenya) Ltd
27	Njeru Industries Ltd	28	Devon International Ltd
28	Nyayo Tea Zones Devt. Corporation	29	DHL Supply Chain Kenya Ltd
29	Ngorongo Tea Company Ltd	30	Diamond Tea Exporters (K) Ltd
30	Siret Tea Company Ltd	31	Empire Kenya (EPZ) Ltd
31	Sisibo Tea Factory	32	Global Tea & Commodities (K) Ltd
32	Sotik Highlands Tea Estate	33	Gokal Beverages (EPZ) Ltd
33	Sotik Tea Company Ltd	34	Gokal Trading (Kenya) Ltd
34	Siomo Tea Factory (EPZ) Ltd	35	DL Redwood Limited
35	Tachasis Tea Factory Ltd	36	Green Leaf Trading Co. Ltd
36	Unilever Tea Kenya Ltd	37	Highland Taste Ltd
37	Williamson Tea Kenya Ltd	38	Hydery (P) Ltd
В	UGANDA	39	Indo-Africa
38	Dayalbhai Madanji & Co	40	Imperial Teas (EPZ) Ltd
39	Eagle Investments Ltd	41	James Finlay Mombasa Ltd
40	Global Village Tea Company Ltd	42	Janish Tea Ltd
41	McLeod Russel Uganda Ltd	43	Jawai Tea Ltd
42	Kigezi Highland Tea Ltd	44	Juja Coffee Exporters Ltd
43	Kijura Tea Factory Ltd	45	Kentea Grinline Ltd
44	Kinkiizi Development Co. Ltd	46	Kirindo Traders Ltd
45	Kyamuhunga Tea Company Ltd	47	Kinengena Tea Trading Co. Ltd
46	Mabale Growers Tea Factory Ltd	48	L.A.B. International (K) Ltd
47	Mpanga Growers Tea Factory Co. Ltd	49	Lindop & Company (Kenya) Ltd
48	Mwera Tea Estate	50	Lula Trading Co.
49	Namayiba Tea Estate Ltd	51	Lutex Limited
50	Nyambya Tea Company Limited	52	M.J. Clarke Ltd
51	Rwenzori Commodities Ltd	53	Mara Chai Limited
52	Rusekere Growers Tea Factory Ltd	54	Maymun Enterprises Ltd
53	Swazi Highland Tea Co. Ltd	55	Mcleod Russel Africa Limited
54	The Toro & Mityana Tea Co. Ltd	56	Mombasa Coffee Ltd
55	Uganda Tea Corporation	57	Mombasa Tea Traders Ltd

56	Uganda Tea Development Agency Ltd	58	Naushad Trading Company Ltd
С	TANZANIA	59	Peshwood Enterprises Limited
57	Bombay Burmah Trading Corporation Ltd.	60	Pwani Hauliers
58	East Usambara Tea Company Ltd	61	Ranfer Teas (Kenya) Ltd
59	Ikanga Tea Company Limited	62	Rauf Coffee & Tea Exporters Ltd
60	Kibena Tea Ltd	63	Riotana Trading Limited
61	Mohammed Enterprises (T) Ltd Agriculture Division	64	Sardia International Co. Ltd
62	Mufindi Tea Company Ltd	65	Sasini PLC
63	Unilever Tea Tanzania Ltd	66	Seline Investments Limited
D	RWANDA	67	Shakab Imports Exports Co. Ltd
64	Gisakura Tea Company Ltd	68	Sondhi Trading Ltd
65	Gisovu Tea Company Ltd	69	SSOE (Kenya) Ltd
66	Karongi Tea Factory Ltd (Manages Muganza Kivu)	70	Stansand (Africa) Ltd
67	Nshili Kivu Tea Factory S.A.R.L.	71	Summer Liner Company Ltd
68	Mata Tea Company Ltd	72	Suwad Enterprise Limited
69	Mulindi Factory Company Limited	73	Tanjal Tea Company Ltd
70	MultiSector Investment Group Limited (MIG Ltd)	74	Tanziil Trading Ltd
71	Pfunda Tea Company Ltd	75	Tea Scape Africa Ltd
72	Rwanda Mountain Tea(Manages Rubaya, Nyabihu, Kitabi, Rutsiro & Gatare Tea Factories	76	Teavana Tea Store Ltd
73	Shagasha Tea Company Limited	77	Tecof Trading Ltd
74	Sorwathe S.A.R.L.	78	Toga Limited
Е	MALAWI	79	Tropical Crops & Commodities
75	Kawalazi Estate Company Limited	80	Trust Tea Traders East Africa Ltd
76	Makandi Tea & Coffee Estates Ltd	81	Tusha Tea Limited
77	Naming'omba Tea Estates Ltd	82	Unilever Tea Kenya
F	DEMOCRATIC REPUBLIC OF CONGO	83	United (E.A) Warehouses Ltd
78	Complexe Theicole de Butuhe	84	Van Rees Kenya Ltd
79	Great Lake Plantations (SARL)	85	Waso Tea Enterprise Ltd
G	BURUNDI	86	Zamai Enterprises Ltd
80	Prothem-Usine S.A.		BROKER MEMBERS
81	Office du The du Burundi	1	Africa Tea Brokers Ltd
Н	MADAGASCAR	2	Atlas Tea Brokers Ltd
82	Sidexam SA	3	Anjeli Ltd

G	MOZAMBIQUE	4	Bicorn Exim Tea Brokers Ltd
83	Cha de Magoma Joao Ferreira Dost Santos, S.A.R.L.	5	Centreline Tea Brokers Ltd
84	Sociedade de Desenvolvimento da Zambezia, Limitada (SDZ CHA Ltd)	6	Choice Tea Brokers Ltd
G	ETHIOPIA	7	Combrok Ltd
85	Ethio Afri-Ceft PLC	8	Prudential Tea Brokers (E.A.) Ltd
	WAREHOUSE MEMBERS	9	Tea Brokers East Africa Ltd
1	Bahari (T) Company Ltd	10	Union Tea Brokers Ltd
2	Bryson Express Ltd	11	Venus Tea Brokers Ltd
3	Byline Swift Services Ltd		PACKER MEMBERS
4	Cargill Kenya Ltd	1	Chai Trading Company Ltd
5	Chai Trading Company Ltd	2	Chippendales Kenya Ltd
6	DHL Supply Chain Kenya Ltd	3	Cofftea Agencies Ltd
7	DL Koisagat Tea Estate Ltd	4	Gold Crown Beverages (Kenya) Ltd
8	James Finlay Mombasa Ltd	5	Karirana Estates Ltd
9	Kipkebe Limited	6	Kenya Nut Co. Ltd
10	Mitchell Cotts Freight Kenya Ltd	7	Kenya Tea Packers Ltd
11	Pacmac Holdings Ltd	8	Majani Bora Packers Ltd
12	Risala Limited Mozambique Road, Shimanzi, TTW No.140.	10	Sasini (K) Limited
13	Bollore Transport & Logistics Kenya Ltd	11	Tower Bridge Tea Company Ltd
14	Siginon Group Ltd		ASSOCIATE MEMBERS
15	SGS Kenya Ltd	1	Bank of Africa Ltd
16	Tea Warehouses Ltd	2	Equity Bank (Kenya) Ltd
17	Ufanisi Freighters (K) Ltd	3	I&M Bank Ltd
18	United (EA) Warehouses Ltd	4	National Agriculture Export Development Board (NAEB)
	L	5	Nedbank Ltd
		6	Polucon Services (K) Ltd
		7	Stanbic Bank Kenya Ltd
		8	ABC Bank Ltd
		9	Ecobank Kenya Ltd

# Appendix 10: List of Members of MSTA

Mombasa SME Association Members	
S/No.	Company Name

1	APT Commodities Limited
2	Lutex Tea Ltd
3	Tropical Crops & Commodities Ltd
4	Chamu Supplies Limited
5	Maymun Enterprises Ltd
6	Trust Tea Traders
7	Summer Liners Ltd
8	Kinengena Tea
9	Jawai Tea
10	Kent tea
11	Kirindi Traders
12	Riotana Ltd
13	Afro Tea Ltd
14	Bryson Tea Ltd
15	Broadline Traders
16	Akwany Tea
17	Toga Tea Ltd
18	Aspire Ventures
19	Peshwood Enterprises Limited
20	Janish Tea
21	Smart tea
22	Seatape Tea
23	Kerichu Crops
24	Black Dew Limited
25	Mara Chai Ltd
26	Fajri Tea
27	AEON Kenya
28	Zamai Enterprices
29	One Touch Limited
30	Tea Scape Africa Ltd
31	Crystal Face

## Appendix 11: List of Members of Kenya Purple & Specialty Tea Association

1)	Gatanga Industries Limited
2)	Tea Greens Kenya
3)	Emrok Tea Factory EPZ
4)	Michimikuru tea Factory (KTDA)
5)	Itumbe Tea Factory (KTDA)
6)	Kangaita Tea Factory (KTDA)
7)	Horera tea Company
8)	James Finlay (K) Itd
9)	Kiriti Tea Factory
10)	Siomo Tea
11)	Tumio Tea Factory
12)	Kabianga Tea Factory
13)	Chemusot Ltd
14)	Central Highlands Tea Co.
15)	Njeru Industries Limited
16)	Chai Imara Limited
17)	DL Koisagat Tea Factory
18)	Oriental Tea Africa Limited
19)	Beta Tea Limited
20)	Ever Green Te
21)	Ndarawetta Factory
22)	Ernestea Factory
23)	Nandi Tea Estates
24)	Evergreen Tea Factory
25)	Mara Tea Factory

### Appendix 12: List of Organisations Visited for Resource Efficiency Benchmarking

#### Kenya

- NTZDC Kipchabo tea factory in Nandi county,
- Medium size and independent factories;
  - Kaisugu Tea Factory in Kericho County,
  - Karirana Tea Factory in Kiambu County,
  - Maramba Tea Factory in Kiambu County,
  - Mau Multipurpose Tea Factory in Kericho County,
  - Ngorongo Tea Factory in Kiambu County
  - Siret Outgrowers Empowerment Project tea factory in Nandi County
- Multinational companies;
  - Eastern Produce Kenya (EPK) in Nandi County,
  - Williamson Tea Estates (K) limited Changoi factory in Kericho County,
  - Finlays Kenya Limited in Bomet County

#### Tanzania

- Katumba Tea Factory, of Wakulima Tea Company, in Rungwe District, Mbeya Province,
- Chai Bora Tea Packing Factory in Mafinga District, Iringa Province,
- Itona Tea Factory, of DL Group Tanzania, in Mufindi District, Iringa Province,
- Kibena Tea Factory, of DL Group Tanzania, in Njombe District, Njombe Province.

#### Burundi

- OTB; Rwegura and Teza Tea Factories,Prothem; Gisonzi Tea Factory.