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3rd Prize

KTDAL – Building Sustainability through Inclusion

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KTDAL – Building Sustainability through Inclusion

Abstract

Kenya Tea Development Agency Limited (KTDAL) follows a unique model under which small tea farmers are shareholders. By the end of 2013, it had around 560,000 such shareholders. The farmers not only get money for the tea leaves they produce but also receive a share in the profits, which means they receive a higher price per kg of tea leaves than tea farmers anywhere else in the world. KTDAL's inclusive model has empowered the farmers to control and own the entire tea industry value chain. KTDAL's market driven sustainable model has managed to get the market closer to the small tea farmer and make Mombasa one of the world's top tea auction centres.

KTDAL promotes sustainable agricultural practices among its small farmers through its Farmer Field Schools and, apart from achieving economies; the business model reduces costs by collective bargaining. It improves efficiencies and quality by leveraging on modern agricultural and processing techniques. KTDAL's benefits go beyond commercial viability with the social, environmental, and economic lives of 4 million people being impacted, directly or indirectly.

The KTDAL business model, which has made small farming viable, can be replicated to address some of the basic issues and challenges facing the developing world, which has millions of small farmers. However, the model has been facing tough challenges of late. The KTDAL small farmers are facing price fluctuations, rising production costs in the form of increasing labour costs, environmental concerns, and unfavourable climatic conditions.

Amidst this uncertainty, some farmers have called for abandoning KTDAL and going back to the old Parastatal system in which the government of Kenya provided aid and relief to small farmers in case of natural disasters like floods and famine and also purchased the produce at a minimum support price. This facility is not available to the KTDAL small farmers as KTDAL is registered as a private company. It remains to be seen how KTDAL will address this rebellion within and whether it will emerge stronger.

> *"To provide effective management services to the tea sector for efficient production, processing, and marketing of high quality tea and investing in related profitable ventures for the benefit of its shareholders and other stakeholders."*
>
> **– KTDA Limited, Mission Statement**[1]

INTRODUCTION

During the year 2011-12, the small tea farmers in Kenya were paid an average of KES[2] 50.01 per kg of tea leaves produced on their farms[3]. This was the highest price paid to any small tea farmer in the world. The success of the small tea farmers in Kenya was the direct result of the efficiency and effectiveness of the business model implemented by the Kenya Tea Development Agency Limited (KTDAL). For this effort, KTDAL won the **"Excellence in Inclusive Business"**[4] award in 2013**.** Mr. Lerionka Tiampati, CEO, KTDAL, who received the award, dedicated it to all the farmers who were a part of the KTDAL operations[5]. KTDAL was acknowledged as the best management agency in the world, providing agency services for the development of the small tea sector in Kenya. Through consultancy and advisory services in tea farming, KTDAL assisted and supported around 560,000 small tea farmers in managing cultivation and producing tea of the highest quality[6].

Besides, KTDAL procured and provided inputs like fertilizers at the lowest cost, and organised and managed the supply chain, marketing, and warehousing services ***(Refer to Exhibit-I for KTDAL Supply Chain).*** By organising and managing the supply chain, KTDAL was able to provide direct employment opportunities to around 10,000 people across the supply chain, while at the same time benefiting around 4 million people indirectly at the ground level[7]. KTDAL, which promoted sustainability among more than half a million small farmers in Kenya, was facing challenges which included price fluctuations, rising production costs in the form of increasing labour and energy costs, environmental concerns, and unfavourable climatic conditions. It was working on various alternatives to build a robust sustainable model that it hoped would help it overcome these challenges amidst calls from a few small farmers to abandon KTDAL and move back to the Parastatal system.

BACKGROUND

Before the 19th century, agriculture in Africa was mainly subsistence farming with most of the fertile land being left unused. It was with the advent of the British colonial rulers that the agricultural scenario witnessed a major transformation. The colonial rulers occupied or acquired a majority of the fertile land from the native Africans and encouraged British and other European settlers to take to agriculture in Africa by passing laws and policies that favoured the settlers. The native Africans were made to work as labourers in the settlers' farms.

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1 www.ktdteas.com

2 Official Kenya Currency Kenyan Shilling (KES)

3 KTDA announces record revenue of KSh 61.4 billion earned by tea farmers, www.ktdateas.com, September 18, 2012.

4 An award given by Financial Times (FT)/International Financial Corporation (IFC) during an annual conference held in June 2013. The awards were given to recognize, encourage, and motivate organizations and firms implementing and following sustainable business practices. FT/IFC organizes annual conferences on specific areas and gives awards to companies and firms excelling in those areas.

5 Press release, KTDA wins global sustainable Award, www.ktdateas.com, accessed during August, 2014.

6 Press release, IFC Loans KTDA US$ 12 million to support smallholder tea farmers, www.ktdateas.com, accessed during August, 2014.

7 Charles K.Kimathi & Francis M.Muriuki, A Showcase of Smallholder Agriculture in the EAC: The Case of Small Scale Tea sector in Kenya, www.kilimotrust.org, accessed during August, 2014.

Though there was friction between the European settlers and the locals, Kenyan agriculture was broadly classified into two — large farmers who owned plantations covering thousands of hectares of land and small farmers with an average holding of less than 0.50 hectares of land[8].

The migrants introduced new species of plants and new agricultural practices into the African countries. In the year 1903, a European settler, G.W.L.Canine from India, planted tea in Limura, a small town in the Kiambu District of Kenya, for the first time. The geographic conditions of Kenya supported the growing of tea almost throughout the year. In the year 1914, when an officer (Tom Rutter) from Brooke Bond[9] in India, visited Kenya, he identified the potential for growing tea in the country. The first small tea farms started mushrooming in Kericho, a town near Limura.

Looking at the growth of tea plantations in Kenya, Brooke Bond opened a sales office at Mombasa[10] in the year 1922. The company acquired tea plantations at Limura too and launched commercial operations of trading in tea in the year 1924. It also opened a processing factory in 1927 at Mabroukie[11] near Limura, which was popularly called Mabroukie Tea Factory.

Following in the footsteps of Brooke Bond, another multinational company, James Finlay Limited[12], also forayed into the business of growing tea in Kenys in 1928. But only the large tea plantation owners gained from growing tea; the small farmers had little scope to compete as the government policies did not encourage the small farmer to utilise land properly, gain awareness about emerging agriculture practices, or create a market for their produce.

This situation fostered a strong resentment among the small scale farmers against Colonial policies. The small farmers demanded equal rights and opportunities in the agriculture sector. Several committees were formed by the Colonial government to address the issues of the small farmer. But it was only during 1945-1950 that it identified that there was a demand for tea in the global markets and realised the need to encourage the small tea farmer to meet that demand. To provide better opportunities for the small tea farmer, the Colonial government established the Tea Board of Kenya (TBK) in the year 1950.

Further in its endeavour to develop the small farmer, the Colonial government formed a committee under the chairmanship of Roger Swynnerton (Swynnerton)[13] in the year 1954 to provide a road map for the development of the small farm sector. This committee advised that a separate authority be established to address the issues of the small farmers. The Special Crops Development Authority (SCDA) was thus formed in the year 1960 to oversee the operations and growth of the small farmers by providing the necessary guidance, technical assistance, and financial support.

The period 1950-60 saw the small farmer, especially the small tea farmer, reap the benefits of the initiatives taken by the Colonial government. In the year 1957, the Colonial government established a processing factory at Ragati[14]. Though the tea produced lacked quality, the factory established the small tea farmer's competency to meet global demand.

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8 Francis Mwauru and Ogise Muku, Tea Research Foundation of Kenya, Tea Farming Enterprise Contribution to Smallholders' Well Being in Kenya (2007), http://ageconsearch.umn.edu/, accessed on August, 2014.

9 A world renowned tea manufacturing company founded in the year 1845 in the United Kingdom.

10 The second largest city in Kenya located along the sea coast, it has the largest port supporting major export activities.

11 A location near Limura Tea Plantations.

12 A reputed global brand operating in diversified areas and known for producing tea, it was established in the year 1745 in the United Kingdom.

13 Assistant Director, Ministry of Agriculture, Colonial Government during the year 1954.

14 A location near the farms of a small tea farmer

POST-INDEPENDENCE SCENARIO

After Kenya gained independence in the year 1963, the Government of Kenya (GoK) under the leadership of Jomo Kenyatta (Kenyatta)[15], endeavoured to reform the agriculture sector. Kenyatta took a special interest in the development of the small tea sector. He decided to remove the tea sector from the purview of the SCDA and established the Kenya Tea Development Authority (KTDA) to which he entrusted the responsibility of developing the small tea farmer. In association with private players and multinational companies, KTDA established buying centres and processing factories near the small tea farms.

It also focused on providing transportation, marketing, and logistics facilities to carry the tea leaves from the farms to the processing factories and from the factories to the auction centre for final sale ***(Refer to Exhibit-II for the Structure of Supply Chain under KTDA).*** KTDA was supported by international financial organisations, multinational companies, and other private parties in financing its operations. Some of the private parties and multinational companies also acted as the managing agents of KTDA.

KTDA also provided extension services[16] for tea production. It took a special interest in training the small tea farmers in farm husbandry skills, farming practices, and the plucking and collection of tea leaves. The KTDA farmers were known for following a unique plucking practice popularly called *"Two Leaves and a Bud"*[17]. Also called a fine plucking technique, this standard revolutionised quality standards in the tea sector across the world. Besides, KTDA also launched a fertilizer application programme and closely monitored its implementation. All these activities resulted in the production of a quality product. The KTDA tea was acknowledged for its quality across the world. By leveraging on the geographical distribution of the small farmers across various regions of Kenya, KTDA encouraged them to produce various kinds of tea with different attributes as demanded by different buyers across the world.

KTDA tied up with various private players for the provision of services, especially in the supply chain. The services provided by these private players yielded positive results. But there was a setback in 1975 when the small tea farmers and their supporters questioned the operations of these players. They pointed out that the private players were operating the supply chain in such a way as to benefit themselves and were preventing the farmers from getting a better price for their produce. The issue was taken up to the president, Kenyatta, by the Managing Director, KTDA, Charles Karanja. Kenyatta gave his consent to KTDA being given the authority to take over control and to manage the supply chain operations.

Within 10 years of its establishment, KTDA managed to attract a sizeable number of small tea farmers It grew from 20,000 registered farmers in 1964 to 214,000 by the end of 1989[18]. As a consequence, the land under the small tea sector was also increased from 4,000 hectares to around 60,000 hectares during the same period. Tea production increased from 10,000 kg to 500 million kg[19]. With the growing demand for production, KTDA established new factories besides acquiring existing ones which were owned by multinational companies. The number of factories increased from six during the 1960s and70s to 39 during 1980-89. Under KTDA, the small tea sector became a completely local business representing the local people. The managerial staffs working at the factories and the trainers were all replaced by local men and women.

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15 He was a well-known social activist and politician. He was the First Prime Minister (1963-1964) of independent Kenya and then became President (1964-1978) of the country.

16 The extension services include assisting a farmer in the development of crop productivity and quality.

17 A unique tea leaves plucking technique followed by small tea farmers in Kenya. The technique specifies that the farmer pluck only the top two freshly grown leaves and the youngest bud from the tea bush.

18 Charles K.Kimathi & Francis M.Muriuki, A Showcase of Smallholder Agriculture in the EAC: The Case of Small Scale Tea sector in Kenya, www.kilimotrust.org, accessed in September 2014.

19 Charles K.Kimathi & Francis M.Muriuki, A Showcase of Smallholder Agriculture in the EAC: The Case of Small Scale Tea sector in Kenya, www.kilimotrust.org, accessed in September 2014.

The tea produced in Kenya was sent for auction at the London Tea Auction cente[20]. With an increase in the volume of tea production in Kenya and other East African countries, there was a demand from the traders and tea farmers for establishment of an auction centre at Mombasa. Though this demand was not supported by the government, KTDA with the support of farmers, traders, and other stakeholders was successful in creating an auction centre at Mombasa.

"So KTDA together with the buyers, colluded to derail the London Auction and build the Mombasa Auction. Our desire to leave the London Auction was driven by the fact that it was very expensive to pay the brokers, pay the warehousing, as well as pay for the shipping of the tea to Britain," said Mr. Mutai M'Imanyara, Ex Chairman, KTDA[21].

Consequently, the Mombasa Tea Auction Centre (MTAC) became the third leading auction centre in the world after India and Sri Lanka. MTAC became a trading hub for Kenya and other East African countries.

ORIGIN OF KTDAL

The 1990s saw a series of agitations in Kenya which resulted in political and economic uncertainty. The mismanagement of the Parastatals[22] of different cash crops and the political interference in the framing of policies had an adverse effect on the agriculture sector. The government policies were regarded as anti-growth and this created uncertainty in the tea and coffee growing regions. A group of parlimantarians led by opposition party leader Mwai Kibaki formed an association called the Coffee and Tea Parliamentary Association (COTEPA), and demanded in parliament that these sectors be privatised and liberalised.

Besides, there was a demand from the small tea farmers and other stakeholders for a restructuring of KTDA. The farmers aspired for representation in the decision-making process. They demanded a change in governance and in the regulatory and administrative structure. The demand for privatisation and liberalisation continued for almost 10 years. With a view to promoting efficiency and competitiveness, encouraging private investments in the sector, and introducing growers' participation in the ownership and management of tea factories, KTDA was finally privatised on June 30, 2000. It was transformed into a private company and registered under the Companies Act as the Kenya Tea Development Agency Limited (KTDAL) ***(Refer to Exhibit-III for the Structure of the Small Tea Sector at the time of Privatisation of KTDA).***

BUSINESS MODEL

To become a shareholder of KTDAL, the small tea farmers of Kenya had to register as suppliers of tea leaves at the Tea Factory Companies (TFCs). After registration, they became owners of the concerned TFC. As shareholders, the farmers provided the necessary funds in the form of deductions from the tea leaves supplied. On an average, each TFC needed an investment of around KSh 500 million[23]. On this investment, each TFC generated significant revenues. For example, the total revenue generated by a TFC (Chebut Tea Factory Company Limited) for the year 2011-12 was approximately equivalent to KSh 2000 million[24].

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[20] Recognised as the oldest and largest tea auction centre in the world, it was formed in the year 1837. Its operations were later abandoned and it was finally closed down after it failed to overcome competition in world markets.

[21] Charles K.Kimathi & Francis M.Muriuki, A Showcase of Smallholder Agriculture in the EAC: The Case of Small Scale Tea sector in Kenya, www.kilimotrust.org, accessed on September, 2014.

[22] An organisation (or) entity in which the government holds the authority and control, especially in African countries. They are also a form of Government Owned Enterprises

[23] Charles K.Kimathi & Francis M.Muriuki, A Showcase of Smallholder Agriculture in the EAC: The Case of Small Scale Tea sector in Kenya, www.kilimotrust.org, accessed during August, 2014.

[24] Calculated based on the financial information provided for the period 2011-12, www.ktdateas.com

The management board of each TFC was elected by the shareholders. The management boards of all the TFCs sponsored KTDAL as their managing agent. The management personnel of KTDAL were appointed by the management boards of the TFCs. KTDAL provided agency services to 54 TFCs operating near the catchment areas of small tea farmers. Each TFC had its own Tea Processing Unit (TPU). With a few TFCs having more than one TPU, there were 65 TPUs in all. By the end of the year 2013, the number of small tea farmers registered under the KTDAL managed TFCs was 560,000 and this number was expected to go up to a million in future ***(Refer to Exhibit-IV for Operational Framework of Small Tea Sector under KTDAL).***

The farmers under KTDAL were paid on a monthly and annual basis. Based on the quantity of tea leaves delivered, the farmers were paid per kilogram every month. Besides, they were also paid an annual bonus (or) dividend for every financial year (Financial year - July to June). Put together, during the year 2012, the farmers earned an average of KSh 50.01 per kg[25].

Under the management of KTDAL, the small tea farmers availed of the opportunity of extension services ***(Refer to Exhibit-V for the Extension Services Offered by KTDAL)***. KTDAL provided estate management services and logistics services for carrying tea leaves from the farms to the buying centres and from the buying centres to the TPUs. Once the tea was processed at a TPU, KTDAL managed the marketing and sale proceeds of the tea at the Auction centre. KTDAL took on the responsibility of receiving the amount from sale proceeds and paying the farmers the amounts due to them. KTDAL also provided auditing and accounting services for the TFCs. Besides, it offered Information Technology services for data management and communication purposes. These activities were managed by a KTDAL appointed Factory Unit Manager. The manager was responsible for managing and controlling the operations of the factory and for executing the services offered by KTDAL.

The major source of revenue for KTDAL was the management fee paid by the TFCs, which was 2.5% of their net revenues[26].With a view to strengthening its operations and increasing its revenues, KTDAL established subsidiaries under its ownership. The subsidiaries not only met the requirements of the KTDAL farmers, but also served the requirements of other farmers — which generated an additional source of revenue ***(Refer to Exhibit-VI for List of subsidiaries functioning under KTDAL).***

In the year 2010, KTDAL initiated a major transformation in its organisational structure. Its scope was expanded with the creation of KTDA Holdings Limited (KTDAHL) and KTDA Management Services Limited (KTDAMS). KTDAHL was responsible for making investment decisions, whereas KTDAMS was responsible for providing management services for the TFCs under a management agreement. The Managing Directors and General Managers of all the subsidiaries were brought under the control of KTDAHL. They reported to the group's Chief Executive Officer heading KTDAHL ***(Refer to Exhibit-VII for KTDAHL Shareholdings Structure).***

All the TFCs came under 12 Zones with each Zone representing a group of 5 to 7 TFCs. Each Zone elected a Board Member who would represent it on the Board of Directors of KTDAHL. The Board Member elected through each Zone also acted as as one of the directors of a TFC under that specific Zone. Each TFC had Six Directors, representing a catchment having six electoral segments. The elected Board of Directors of KTDAHL elected one from among them as Chairman and appointed the Chief Executive Officer/Managing Director and all other Managers. The Elections for Factory Directors and Board of Directors of KTDAHL were held every year in accordance with Company Law.

[25] Press release, IFC Loans KTDA US$ 12 million to support smallholder tea farmers, www.ktdateas.com, accessed during August 2014.

[26] Charles K.Kimathi & Francis M.Muriuki, A Showcase of Smallholder Agriculture in the EAC: The Case of Small Scale Tea sector in Kenya, www.kilimotrust.org, accessed on September, 2014.

KTDAL handled freight and trading services through Chai Trading Company Limited (CTCL). CTCL provided logistics services like clearing and forwarding, shipping and warehousing, and distribution and other transportation services. Trading operations included buying and selling of tea from all the regions of Kenya and other East African countries at the Mombasa Auction Centre. Majani Insurance Brokers (MIB) Limited, another subsidiary of KTDAL, met in-house insurance requirements as well besides looking after the requirements of outside people. Kenya Tea Packers Limited (KETEPA) was incorporated as a private limited company in the year 1977 to provide blending, packing, and marketing services for the tea sector in Kenya. The Corporate Social Responsibility activities of KTDAL were organised through the KTDA Foundation while the financial needs of the farmers were met by Greenland Fedha Ltd.

SUSTAINABILITY THROUGH INCLUSION

The area of tea cultivation under KTDAL increased significantly over the years, going up to 126,000 hectares by the year 2013. The production of tea leaves was 1.1 million tons, having a value of $800 million (KSh 68,000 million (or) KSh 68 billion)[27]. In order to meet the production demands, KTDAL established 20 TPUs in the 10 years since its inception. At the time of privatisation, there were 45 TPUs and by the year 2013, this number had gone up to 65. KTDAL brought about improvements in the production process by introducing Continuous Fermentation Units (CFUs) [28] in all the factories. The CFUs improved production efficiency and reduced labour costs. Each CFU reduced the cost of managing 40 workers.

KTDAL followed a unique training model to train the vast number of farmers who were spread out over a wide area. A select number of farmers were trained in implementing measures that would reduce production costs and also increase the quality of the tea. They were then assigned the responsibility of training and guiding the other farmers cultivating in their local areas. The programme was called Farmer Field Schools (FFSs). The FFSs were organised in association with Unilever and IDH of the Netherlands. For Unilever, it was important that sustainable practices were followed all along the supply chain. This was the only way it could meet the demand for high quality tea.

The FFSs were central to KTDAL's promotion of sustainable agricultural practices among its small farmers. The farmers gained knowledge on the ways to increase productivity and quality. They were taught the best practices in planting and fine plucking, which helped them gain certifications. Special focus was given to reducing the use of pesticides, soil management, conserving the ecosystem, waste management, using compost pills, and sustainable water management. The farmers were also taught ways to grow other crops like cabbage and tomatoes, which not only served to increase their income but also reduced the food scarcity in the region. The FFSs also went beyond agriculture and created awareness among the farmers about empowerment, collective action, and issues related to health.

During the year 2013, around 800 FFSs were launched to train the farmers. Besides, KTDAL planned to extend the training programmes to all the 560,000 farmers by establishing another 3,500 FFSs. The training programme facilitated the factories to get Rainforest Alliance certification[29] in sustainable agricultural practices. In addition, Fairtrade Foundation[30] certified 13 factories for Fairtrade. Sustainable practices enabled the farmers to increase yields by 36% on an average and to receive premiums from buyers of Rainforest Alliance certified teas.

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27 IFC Inclusive Business Model Case Study (KTDA), www.ifc.org, June, 2014.

28 A technology used during the processing of tea. This technology is used to improve the efficiency of tea processing by reducing operational costs and by increasing the quality of tea produced.

29 Rainforest Alliance, a Non-Governmental Organisation, works to conserve biodiversity by encouraging sustainable practices in utilising land resources, business, and human practices. Formed in the year 1987, itoffers certification and training programs in sustainable agricultural practices. The certification given by Rainforest Alliance has an international reputation and the certified individuals or entities are acknowledged for sustainable agriculture practices.

30 An international acknowledgement provided by the UK-based Fairtrade Foundation which ensures and provides an opportunity for traders to get recognition for producing products as per internationally accepted fairtrade standards. The foundation was established in the year 1992.

The tea sector was highly sensitive to changes in climate and the yields and productivity fluctuated based on fluctuations in climate. KTDAL was working to increase the climate reliance of tea farmers. It was also working with various partners, including the Tea Board of Kenya, to assess the vulnerabilities of the tea sector to climate change and the development of a climate-compatible strategy for the tea sector. Besides, KTDAL was working with the Tea Research Foundation of Kenya to develop and make new drought-tolerant, high-yielding tea varieties available to small tea farmers.

Besides, KTDAL managed to get the best possible deals for the farmers and organised them into groups to represent their claims and demands to the government. It also launched an annual fertilizer scheme on credit basis to provide the tea farmers with an opportunity to use imported fertilizer at a reasonable cost. The repayment was made on instalment basis. In the year 2013, KTDAL imported the first instalment of 39,000 tonnes of fertilizer, which was a part of 77,050 tonnes of fertilizer to be imported, worth KSh 2.36 billion[31].

The fertilizer was ordered from Russia after the manufacturer won an international tender that was floated early in 2013. By ordering in bulk through a global tender, the farmers got the fertilizer at the best possible price. KTDAL arrived at the amount to be ordered after its field services staff took fertilizer requirement orders from farmers each year in the months of November and December.

Financing the small farmers was crucial to the sustainability of these farmers. Greenland Fedha Limited (GFL), a subsidiary of KTDAL, was established to serve the financial needs of the farmers. GFL lent up to 30% of the value of a farmer's tea delivery[32]. Since 2009, farmers had been receiving loans to buy farm inputs, tools and equipment, improve tea farming, and support micro businesses. Loan tenures ranged from less than a year to up to three years with a 12.25% p.a. interest rate[33]. During the year 2012, GFL disbursed around 19,000 loans having a value of less than $796 (KES 70,000) [34].

The KTDA Foundation (Foundation) was formed to achieve the Corporate Social Responsibility (CSR) objectives of KTDAL. The major initiative taken up by the Foundation was to plant tree seedlings. The deforestation rate in Kenya was increasing. The globally recommended national forest cover of any country was 10%, whereas it was 5.9% in Kenya.

In order to cut the mounting expenses on diesel, KTDAL decided to run boilers in the factory with the help of wood fuel rather than diesel. In order to meet the demand for wood, KTDAL planned to grow the wood itself. It launched a Tree Planting Project to acquire 34,000 hectares of land with a target that each factory should purchase around 620 hectares of land to plant trees[35].

Each of the 65 KTDAL-managed factories worked with community group nurseries to plant trees and provided the seedlings to tea farmers at subsidised rates. The shift from diesel to wood from managed forests saved each factory about 56 per cent in energy costs per year, resulting in total savings of KES 480 million per year[36]. The Foundation intended to plant 1 million saplings every year. KTDAL was recognised for its environment and climate change initiatives and was awarded the Total Kenya Eco Gold Challenge award in 2013 for planting millions of trees under its fuel wood and environmental activities.

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[31] Philip Mwakio and Daniel Psirmoi, Kenya: First consignment of Sh2.3 billion fertilizer for tea farmers arrives at Mombasa port, http://in2eastafrica.net/, July 20, 2015

[32] IFC Inclusive Business Model Case Study (KTDA), www.ifc.org, June, 2014

[33] IFC Inclusive Business Model Case Study (KTDA), www.ifc.org, June, 2014

[34] IFC Inclusive Business Model Case Study (KTDA), www.ifc.org, June, 2014

[35] Charles K.Kimathi & Francis M.Muriuki, A Showcase of Smallholder Agriculture in the EAC: The Case of Small Scale Tea sector in Kenya, www.kilimotrust.org, accessed on September, 2014

[36] KEPSA, KTDA Increasing the Climate Resilience of Farmers, http://cdkn.org/, April, 2014

Building on its sustainable environmental practices, KTDAL had stopped using firewood in its Makomboki Tea Factory. Instead, it was running the factory on greener and cheaper fuel — briquettes made of biomass by-products (macadamia, cashew, and rice husk mixed with sawdust), which were treated as waste. Sawdust and husk came from nearby factories which were looking for ways to dispose of them. Often, sawdust was burnt in open fields, which led to environmental damage. By moving away from firewood, the Makomboki Tea Factory alone saved 60,000 trees a year. This move also made financial sense as the factory, which had earlier spent 55 million KES (542,000 dollars) per year on firewood, now spent only 30 million KES (295,000 dollars)[37]. KTDAL was working at implementing this sustainable practice in all its factories, one that would conserve both the environment as well as KTDAL for the future.

"We want to run a sustainable business here. I want my son to be a factory manager some day and if everyone conserves the environment that will happen." — John Gitau, Makomboki Factory Manager[38].

Another issue plaguing the African countries was the lack of electricity. While the national electrification rate in African countries was itself only a low 23%, it was 16% in the areas in which KTDAL operated. KTDAL factories operated in 11 locations. Around 80% of the population in these locations relied mainly on kerosene to meet their lighting and cooking needs. KTDAL associated with Barefoot Power[39] and Kiva[40] to provide a low cost and efficient solar lighting system to the farmers. Initially, 1500 farmers paid for the system in instalments. The Foundation planned to spread the opportunity to the remaining locations across the country. The farmers were also provided with energy saving stoves. These were installed in 60,000 farmers' houses. It was estimated that the usage of energy saving stoves would reduce the use of firewood and charcoal by 60%. The Foundation in association with Taylor of Harrogate[41] endeavoured to construct water projects to meet the irrigation requirements of the farmers. They constructed a water project near Makombi Tea Factory called the Makombi Water Project. This water project supported irrigation as well as the drinking water requirements of 3000 families residing around the Makombi Tea Factory.

As per the statistics available with the Ministry of Education, around 200,000 children were deprived of proper education facilities. The Foundation through its National Tea Scholarship programme provided financial support to meritorious children residing near KTDAL-managed TFC catchment areas. In addition, the children were provided with the opportunity to be mentored and with library facilities. The Foundation in association with APHIAPlus[42] organised Health Talks and Campaigns to address the health issues of KTDAL-managed factory staff and farmers. Millions of Kenyans were unable to pay for health services both at public and private facilities. Less than 20% of the population had access to proper health care coverage[43]. The Foundation also renovated and upgraded the existing clinics. It also aimed at the economic empowerment of small scale farmers. It organised training programmes in

37 Suzanne Abou Said Daou, Kenyan tea factory fights climate change by sustainable energy source, www.greenarea.me, August 10, 2015.

38 To Save Forests, Kenyan Factory Brews New Way to Dry Tea, www.sylhettimes.com, accessed during August, 2015.

39 Barefoot Power is a for-profit social enterprise dedicated to providing affordable solar lighting and phone charging solutions to low-income populations that do not have access to electricity.

40 A non-profit organization formed with the mission of connecting people through lending to alleviate poverty. Leveraging the internet and a worldwide network of microfinance institutions, Kiva lets individuals lend as little as $25 to help create opportunities around the world.

41 A leading coffee manufacturer in the UK, under its Environmental sustainability program it aided KTDA Foundation in executing water projects.

42 It is a health program funded by USAID with a view to improving the health of people across the world.

43 Improving Health Care for Kenya's Poor, www.worldbank.org, October 28, 2014.

money management practices like budgeting, savings, banking services, and debt management. By the end of the year 2013, 9,589 farmers as well as factory staff had been trained[44].

In order to promote self sustainability and reduce the cost of electricity, KTDAL ventured into the development of small hydro power plants. The first power plant with a capacity of 1 Mega Watt was launched near one of its factories in the year 2009[45]. The shift to hydro power generation reduced greenhouse gas emissions while the removal of four tea factories from the national grid in the Gura river region was expected to reduce carbon dioxide emissions by about 38,400 tonnes per year. Also, there were plans to launch around 10 small hydro power projects having a total capacity of 24 Mega Watts[46].

ROLE MODEL

Under KTDAL, the capacity of the small tea farmer to produce and earn increased considerably. Out of Kenya's total tea production, 60% was contributed by the small tea sector. On an average, a farmer under the management services of KTDAL produced 2,000 kg of tea leaves, which was equivalent to 450 kg of packed tea[47]. A farmer on an average received 75% of the final auction price[48]. This was the highest payout for a small tea farmer in all the competing countries in the tea segment. During the year 2001, the KTDAL farmer received an average of KES 23.99 ($0.27) per kg of the tea leaf delivered. By the year 2013, this had gone up to KES 45.65 ($0.52)[49] per kg[50]. Under KTDAL, Kenya became the second largest exporter of tea in the world.

The tea sector in Kenya played a major role in the socio-economic development of the country. The growth and prospects of the sector provided sufficient employment opportunities. The sector was also a major contributor to the economic development of the country. During the year 2008, out of the agricultural sector's contribution to the Gross Domestic Product (GDP), the tea sector's contribution was around 11%. Also, the tea exports amounted to KSh 62 billion, contributing around 26% of total foreign exchange earnings[51]. KTDAL's role in proactively addressing challenges was appreciated and acknowledged by various market participants around the world.

The success of KTDAL encouraged other sector players and various governments around the world to replicate the model. The market participants and other players were also of the opinion that the KTDAL model could be adopted across the world and for various agricultural products. They felt that this was the only viable option available to make small farming, which is crucial for developing and underdeveloped nations, sustainable ***(Refer to Exhibit-VIII for Images of Sustainable Practices at KTDAL).***

TWIST

KTDAL was in the process of building a sustainable model to overcome the challenges faced by tea farmers around the world such as rising costs combined with decreasing and fluctuating tea prices and uncertain climatic conditions by bulk ordering of fertilizers directly

44 www.ktdafoundation.org, accessed during August, 2014.

45 Charles K.Kimathi & Francis M.Muriuki, A Showcase of Smallholder Agriculture in the EAC: The Case of Small Scale Tea sector in Kenya, www.kilimotrust.org, accessed during August, 2014.

46 Charles K.Kimathi & Francis M.Muriuki, A Showcase of Smallholder Agriculture in the EAC: The Case of Small Scale Tea sector in Kenya, www.kilimotrust.org, accessed during August, 2014.

47 IFC Inclusive Business Model Case Study (KTDA), www.ifc.org, June, 2014.

48 IFC Inclusive Business Model Case Study (KTDA), www.ifc.org, June, 2014.

49 IFC Inclusive Business Model Case Study (KTDA), www.ifc.org, June, 2014.

50 IFC Inclusive Business Model Case Study (KTDA), www.ifc.org, June, 2014.

51 www.teaboard.or.ke, accessed during September, 2014.

from the producer and developing climate resistant tea plants. But, some of the farmers felt that they were in for a challenging time going forward.

During the period 2010 to 2014, when the price of crude oil was above 100 dollars, the prices of fertilizers shot up to three times the 2008 rates. During some of the years in this period, KTDAL and the factory boards did not order fertilizers as they could not afford the input.Thankfully the yield did not vary much and there was no major uproar.Though the prices corrected themselves after 2014, the average price of all major fertilizers were considerably higher compared to the 2008 levels. Rubbing salt into the wounds of the farmers, the government in late 2013 started imposing a 10% tax on fertilizers along with a 1.5% railway levy on all imports. This dealt a hard blow to the farmers.

Adding to the problems of KTDAL was the gobal overproduction of tea. The supply of tea was outstripping the demand for tea. Kenya's main competitors, Sri Lanka and India, increased their tea production, bringing down the global tea auction prices. These countries were also working aggressively on their exports not only by producing high quality tea but also by resorting to aggressive promotions.At the same time, the taxes and levies on Kenyan tea made the tea expensive.

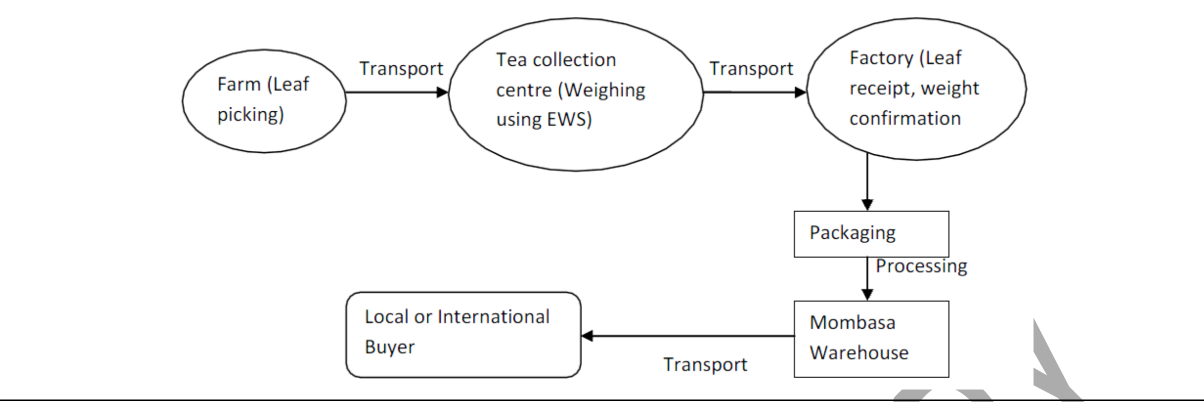
Global warming also had a major impact on the small tea farmers. Some regions of Kenya were already experiencing unpredictable weather patterns with growing occurrences of frost, droughts, and hailstorms. There was a fear among farmers that going into the future, the unpredictability would only worsen. Research done by the Tea Research Foundation in Kenya also showed that climatic changes had affected soil fertitlity and resulted in an increase in pests.

At the same time, the small tea farmers had also seen the Kenyan government granting a subsidy on fertilizers and writing off debts, especially of the maize and livestock farmers. The government was also working on resolving the problems of some of the farmers growing other crops like sugarcane and pyrethrum. Besides, the government had purchased these farmers' produce at a support price. This despite a huge and unsustainable budget deficit ***(Refer to Exhibit-IX for The Policy Issues and Challenges facing Kenyan Parastatals).***

This led to dissension from some farmers within the KTDAL farmers, which came like a bolt from the blue for the company. Some of the KTDAL farmers felt that it would be better to move back to the Parastatal system in which the government of Kenya provided aid and relief to small farmers in case of natural disasters like floods and famine. The government also purchased the produce at a minimum support price. This facility was not available to the KTDAL small farmers as KTDAL was registered as a private company. How KTDAL would address this rebellion within remained to be seen.

Exhibit-I

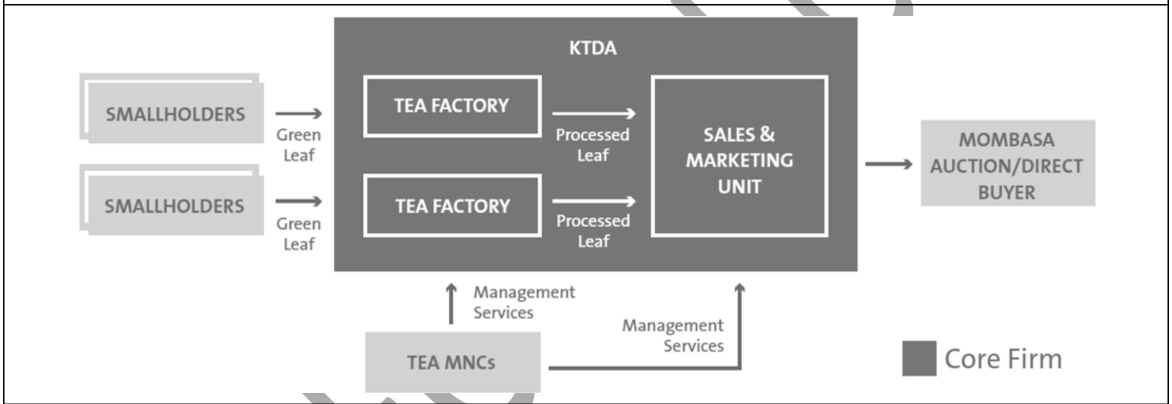
KTDAL Supply Chain



Source: Adapted from Caroline Wanja Ngatia, Supply Chain Management Practices and Performance of Kenya Tea Development Agency Managed Factories, 2013.

Exhibit-II

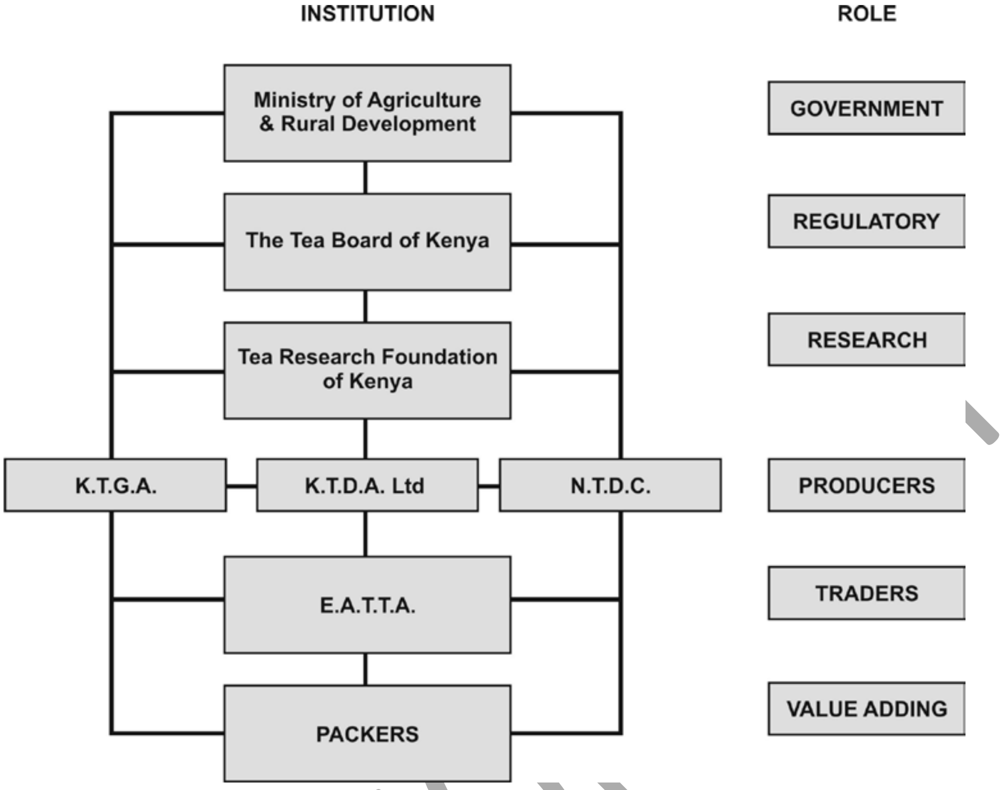
Structure of Supply Chain under KTDA



Source: Adapted from Monitor Deloittee – Overcoming Barriers to Scale to Reach the Poor, January, 2014.

Exhibit-III

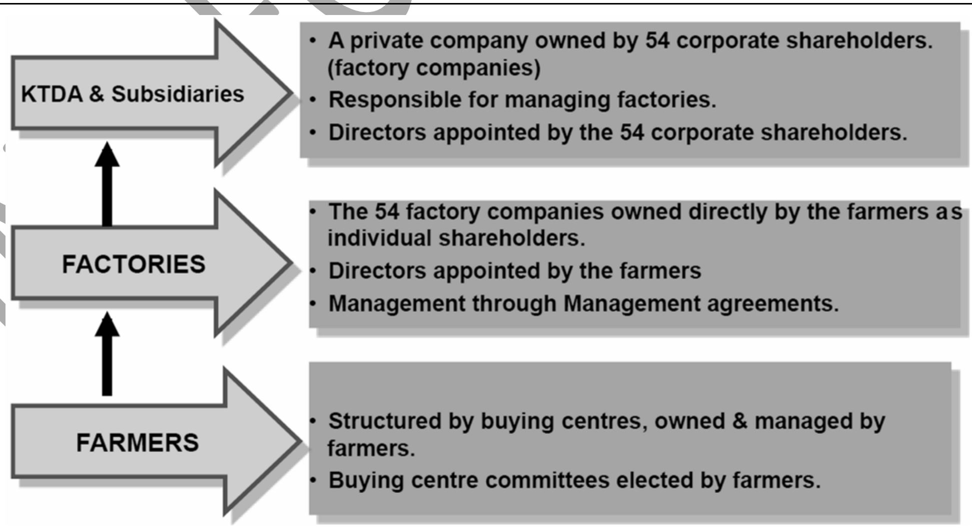
Structure of Small Tea Sector at the time of Privatisation of KTDA



Source: Adapted from Christian Partners Development Agency (CPDA) Report on Small-scale Tea sector in Kenya, March, 2008.

Exhibit-IV

Operational Framework of Small Tea Sector under KTDAL



Source: Adapted from Charles K.Kimathi & Francis M.Muriuki, A Showcase of Smallholder Agriculture in the EAC: The Case of Small Scale Tea sector in Kenya, www.kilimotrust.org, accessed on September, 2014.

Exhibit-V

Extension Services Offered by KTDAL

- Establishment of Tea and Wood fuel nurseries and
- Supervision of
  - ✓ Land preparation by the growers
  - ✓ Planting to the required specifications
  - ✓ Weeding
  - ✓ Fertilizer Application
  - ✓ Tipping
  - ✓ Pruning
  - ✓ Proper Plucking Methods
  - ✓ Infilling and Overall Crop Husbandry

Source: www.ktdateas.com.

Exhibit-VI

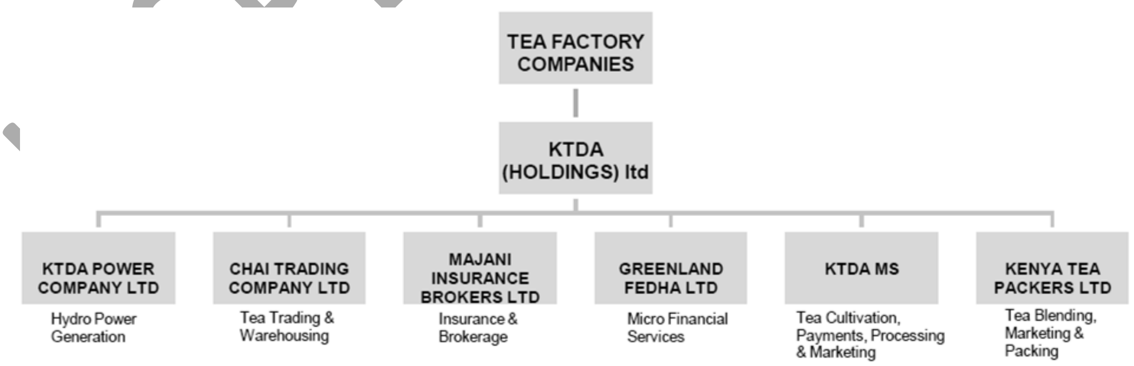
List of subsidiaries functioning under KTDAL

- Chai Trading Company Limited (CTCL)
- Majani Insurance Brokers Limited (MIBL)
- Kenya Tea Packers Limited (KETEPA)
- KTDA Foundation (Foundation)
- Greenland Fedha Limited (GFL)
- KTDA Power Company Limited (KTDAPCL).

Source: www.ktdateas.com

Exhibit-VII

KTDAHL Shareholdings Structure



Source: Adapted from Charles K.Kimathi & Francis M.Muriuki, A Showcase of Smallholder Agriculture in the EAC: The Case of Small Scale Tea sector in Kenya, www.kilimotrust.org, accessed on September, 2014.

Exhibit-VIII

Images of Sustainable Practices at KTDAL	
	
Farmer Field School Programme	**Provision of Logistics Services**
	
Election Process of Directors at KTDAL	**KTDAL's Foundation Programmes**

Source: Adapted from www.ktdateas.com.

Exhibit-IX

The Policy Issues and Challenges facing Kenyan Parastatals

The performance of Parastatals/ State Corporations has been a matter of ongoing concern in an environment of resource scarcity and mounting needs. A number of policy issues and challenges afflict Parastatal in Kenya, including:

1. Lack of clarity on the role that Parastatals/State Corporations should play in the economy. This is compounded by the apparent differences in opinion in respect of the exact role of the state in the national development effort
2. Poor linkage of Parastatals' /State Corporations' activity with the national development goals
3. Conflicting definition of what a Parastatal/State Corporation is in the Kenyan context compounded by multiple legal and regulatory regimes creating significant ownership and oversight challenges
4. Inadequate policy and policy coordination leading to poor definition of mandates, conflicts in mandates, as well as fragmentation of mandates that facilitate the proliferation of poorly resourced Parastatal/State Corporations. It also affects the facilitative role of the state in ensuring effective private sector development that supports the national development effort
5. Poor governance leading to resource loss and burdening the public purse, including a multitude of legal and institutional frameworks that generate multiple reporting and accountability lines, compounding the challenge of effectiveness of Boards and Chief Executive Officers
6. A number of Boards have been weak and/or ineffective, leading to a failure to provide strategic direction, facilitating their emasculation
7. Weak human resource and institutional capacity to attract and retain the skill sets needed to drive performance
8. Lack of a clear government policy in respect of Parastatal/State Corporations
9. Lack of clarity as well as abuse in the process of establishment and dissolution of Parastatal/State Corporations leading to lack of an accurate database on the number of Parastatal/State Corporations
10. An inadequate performance management framework that effectively links performance of Parastatal/State Corporations to national development goals and fails to adequately link individual performance to institutional performance.

Source: Republic of Kenya, "The Report of The Presidential Taskforce on Parastatal Reforms", http://www.cofek.co.ke/, October, 2013.

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