IN IT FOR THE LONG HAUL:

Transformative impact from The Wood Foundation Africa and Gatsby Africa's investments in the Rwandan tea sector

GATSBY AFRICA

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> WE ARE NOW ABLE TO AFFORD MEDICAL AND LIFE INSURANCE IN CASE OF EMERGENCIES, DUE TO THE MONEY WE ARE GETTING FROM TEA.

CHARLES KIBERA, TEA FARMER IN MULINDI, RWANDA

Report written by Ryan Bourque on behalf of Gatsby Africa

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EXECUTIVE SUMMARY

In 2012, The Wood Foundation Africa (TWFA) and Gatsby Africa (GA) purchased majority stakes in two tea factories in Rwanda through a privatisation programme, becoming co-owners with farmer cooperatives that supplied the factories.

After bringing on board an in-house management team of tea professionals to oversee the factories and support smallholders in the field, performance has changed dramatically. Yearly green leaf intake has increased from 8.5 million kgs to 10.6 million kgs for one factory (Shagasha) and from 13.6 million kgs to 17.5 million kgs for the other (Mulindi), while quality has improved, leading to better prices at auction. Improvements in volume, quality and prices have resulted in an average 60% increase in farmers' income per hectare across both factories – translating to improved livelihoods and lives in local communities.

More recently, TWFA and GA have applied a new model to support the Government of Rwanda's planting targets for the sector, focused on creating farmer service companies. In this model, the service companies act as intermediaries that provide patient capital, tea planting services, agronomic advice and production logistics such as weighing and transport of green leaf from smallholders to factories built and run by Unilever and Luxmi. The service companies are yet to reach scale or their full impact, but early signs - in terms of farmer engagement, meeting planting targets and early production - are positive.

Alongside these more direct interventions, TWFA and GA have supported a number of activities in the wider sector. These include engaging in discussions on a government-mandated pricing mechanism, catalysing electronic weighing and payment systems in the industry, providing training schemes for workers, and contributing to the initial development of a proposed e-auction system. As a whole, this programme of work is playing a substantive role in the growth and improved performance of Rwanda's tea industry.

I. INTRODUCTION

1.1 The Rwandan tea sector: An overview

Located near the equator, Rwanda offers great conditions for tea production, with excellent soil, ample sunshine, ideal altitude, and two rainy seasons. This gives the country a reputation for producing a quality cup and consistent volumes throughout the year, with Rwandan tea fetching a premium in the regional Mombasa auction compared to its neighbours.

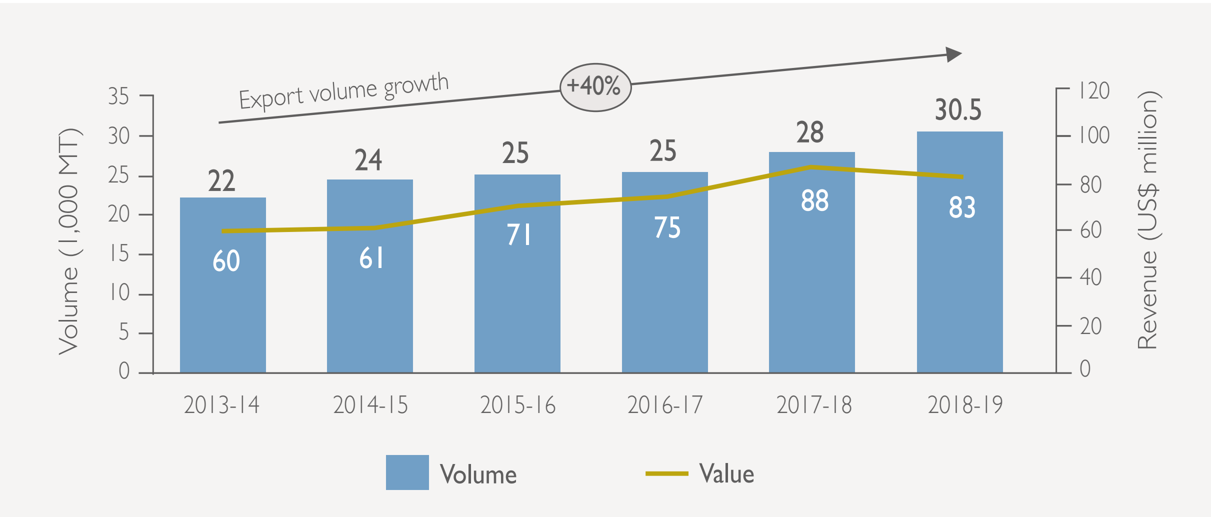
While export volumes are small relative to Kenya, tea is one of the largest sectors in the country. Currently, it is Rwanda's third largest employer, providing income for around 60,000 people. Supply is driven through smallholders, with all Rwandan factories sourcing mostly from farmers cultivating small tea plots within short driving distance of factories. In total, 42,000 out-growers own around 70% of the total area under cultivation.

The sector has been growing steadily since 1994, supported by the effective privatisation of factories and structured government support for investors to increase tea exports as a key source of foreign exchange. Since 2009, the Government of Rwanda (GoR) has implemented its 'Vision 2020' for the sector, which recognises that the country's excellent growing conditions position it well to focus on high quality and niche tea markets, as opposed to the lower value, and price volatile, market for generic black tea. Vision 2020 sets out the long-term ambition of increasing area under tea cultivation from 15,000 to 50,000 hectares. Vision 2020 is built upon by the National Agricultural Export Board's 2019-2024 strategic plan, where tea features heavily as a priority export earner, projected to reach $209 million in annual exports per year by 2024, from $83.5 million in FY 2018-2019.

Despite its potential, the sector has its challenges. Until the government-enforced pricing reform in 2012, the amount paid to farmers for their green leaf was based on the self-declared costs of a factory or cooperative. The system was generally viewed as cumbersome and opaque and had the effect of discouraging farmers from planting and harvesting tea and investing in their plots. The country is also small and hilly, putting significant pressure on land resources. This means that any expansion of production needs to happen primarily on smallholders' land, which can be logistically challenging and expensive to support.

Rwanda exports of tea

2013-2019



Sources: NAEB Annual Reports, 2012/2013-2016/2017; NAEB Strategic Business Plan 2019-2024; Dalberg analysis, 2019

1.2 Overview of TWFA/Gatsby's involvement

The Wood Foundation Africa (TWFA) and Gatsby Africa (GA) have been involved in Rwanda's tea sector since 2011. TWFA and GA are strategic partners, with TWFA taking the operational lead on the ground. This work fits broadly into three categories:

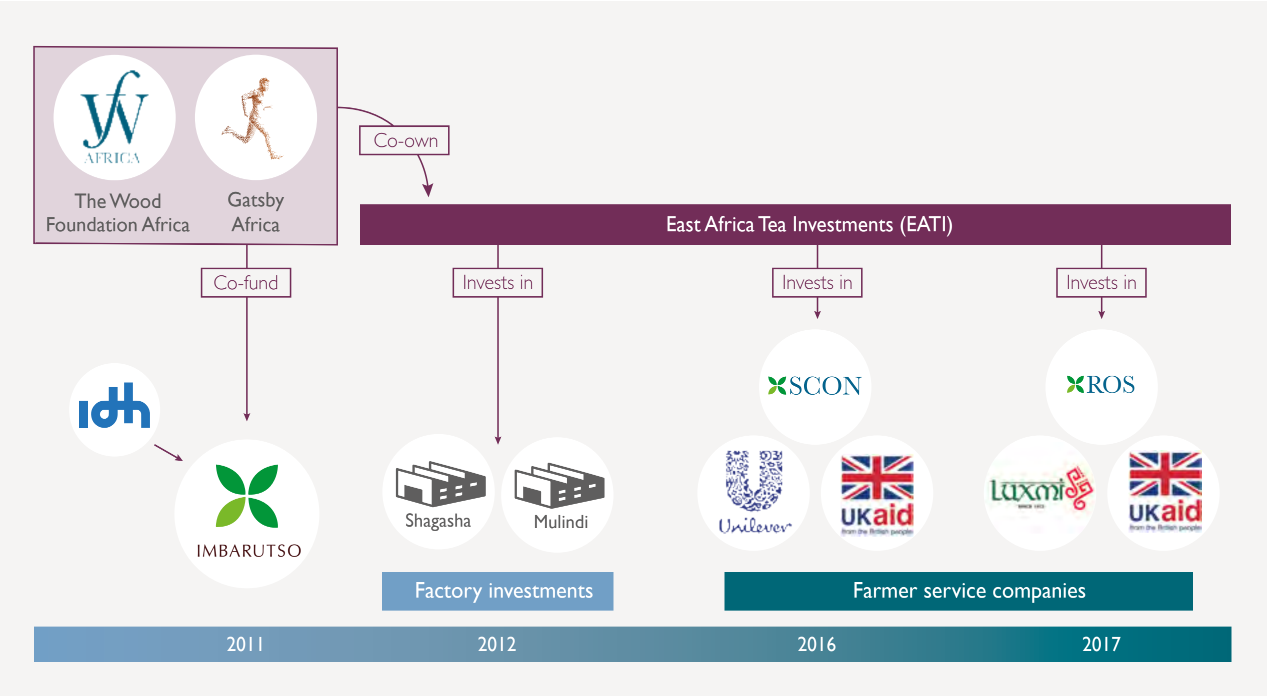
1. Direct investment in brownfield tea factories;
2. Direct investment in greenfield farmer services companies; and,
3. The establishment of a sector development programme called Imbarutso.

Factory investments

Our direct investments in the country began with the purchase of two factories being privatised by the GoR in 2012 - Shagasha Tea Company Limited (Shagasha) and Mulindi Factory Company Limited (Mulindi) - through East Africa Tea Investments (EATI).[1] The intention of the factory investments was to use privatisation as a means to turn around performance through professional factory and field management, repay the initial investment and, over time, demonstrate that smallholder-owned factories could make substantially higher returns for the farmers that supply their green leaf.

Factory staff at Mulindi

Structure of GA and TWFA's engagement in Rwanda



Farmer service companies

With privatisation of existing factories complete in 2012, the GoR focused on further leveraging Rwanda's comparative advantage in tea by increasing land allocated from 15,000 to 50,000 hectares. To support this vision, GA and TWFA first introduced a service company model in 2016 as partners in a greenfield concession that planned to source most of its tea from smallholders. This model provides patient capital, tea planting services, agronomic advice and production logistics such as collection, weighing, transport and payment to smallholder farmers on a commercial, cost-recovery basis. The GA and TWFA partnership has now created two such companies in Rwanda: Services Company Outgrowers Nyaruguru (SCON) and Rugabano Outgrowers Services (ROS), working in partnership with international tea producers Unilever and Luxmi respectively. For their part, Unilever and Luxmi are developing new factories in these locations to purchase green leaf tea produced by farmers, paying a quality premium and planning to provide other support.

Imbarutso

Launched in 2011, Imbarutso was intended as a sector-wide programme, following a market systems approach. Working closely with the government and other industry stakeholders, Imbarutso has targeted interventions to influence the evolution of the tea sector in Rwanda. It engages selectively in these activities but, relative to the investments, they are not the focus of significant management time.

[1] East Africa Tea Investments (EATI), a charitable company co-founded by TWFA and GA to make investments in the region's tea sector, purchased majority shareholdings in Mulindi and Shagasha. The purchase price of both (including an allocation for working capital requirements) was £12.8 million and was finalised in 2012.

2. THE STORY SO FAR

2.1 From facilitation to direct investment (2011-2012)

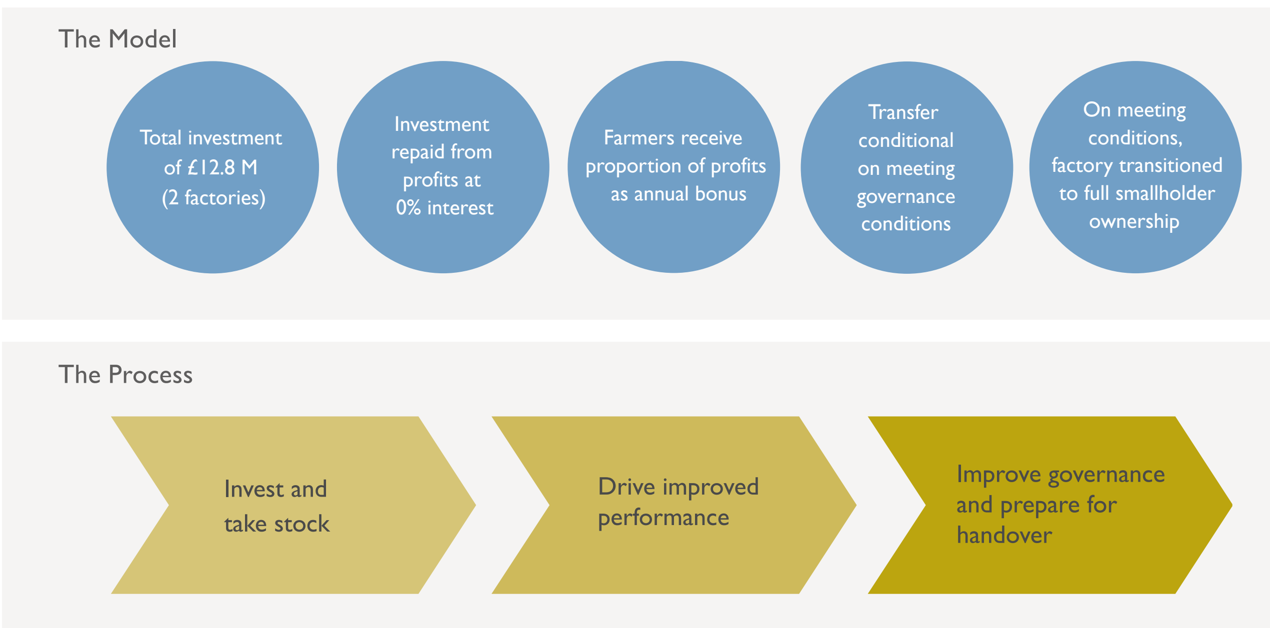
Modelled on GA and TWFA's initial tea partnership in Tanzania called the Chai programme, Imbarutso was designed as a sector development programme using the widely adopted Making Markets Work for the Poor (M4P) approach. As with other M4P programmes, Imbarutso was meant to play a facilitative role in the sector, for example by working to support interested factories to trial new business models for delivering services to farmers, addressing binding constraints in terms of sector coordination and governance challenges, and supporting skills development in the sector.

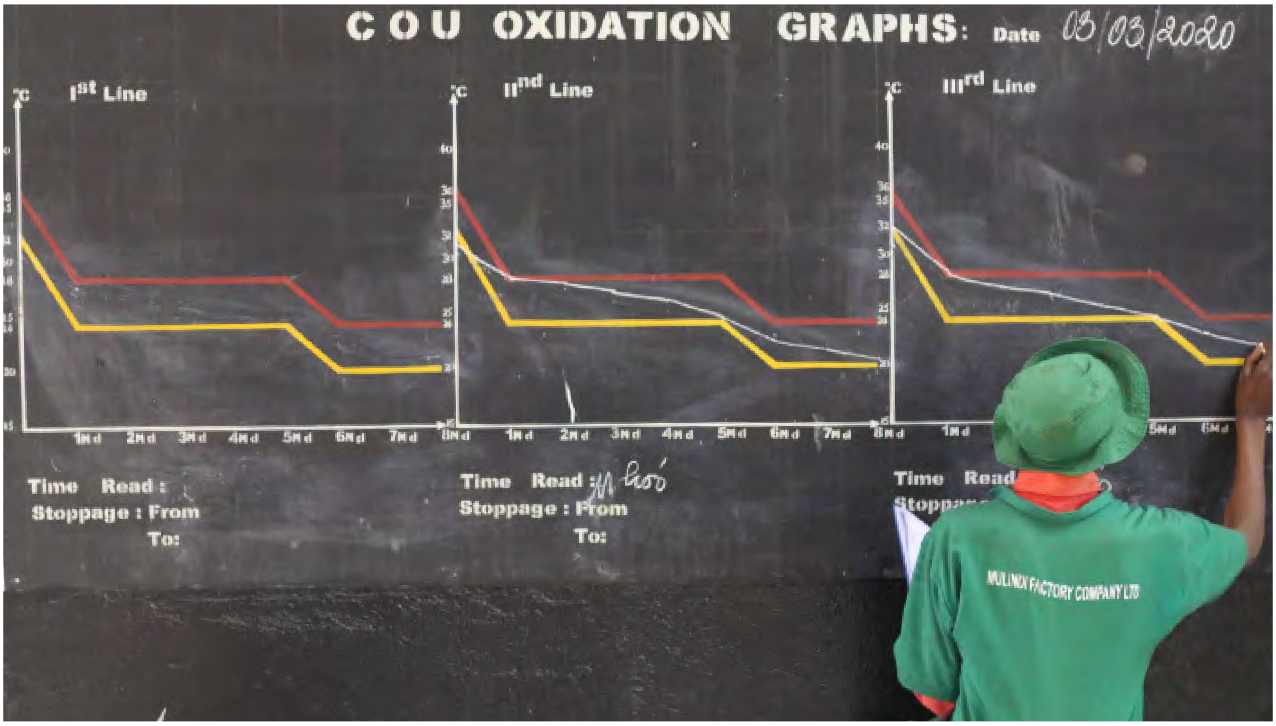
Shortly after being established, however, an opportunity to make a direct investment in the sector presented itself. The Government of Rwanda (GoR) was finalising a long privatisation drive, shifting out of the business of direct engagement in tea production and marketing. Two of the country's oldest factories - Mulindi and Shagasha - were being offered for sale. Given some of the challenges the programme was facing at the time in terms of being able to find receptive partners to work with, GA and TWFA decided on a more interventionist approach. Director of Africa at The Wood Foundation, David Knopp, says: "The tea industry is an industry in East Africa where we didn't see a lot of innovation happening. There was a case to be disruptive and lead by doing."

The basic idea behind the purchases is straightforward: acquire a majority stake in two tea factories along with farmer shareholders, turn their performance around, and then use the cash flow both to repay GA and TWFA initial investment and to increase farmers' incomes. Once the initial funding was repaid, ownership would then transfer to farmers via their local cooperatives. Alongside this, Imbarutso would support farmers to improve yields and quality by providing training and inputs – until the point that the factories could provide these services directly as part of their cost of doing business.

According to Sanjay Kumar, outgoing TWFA Rwanda Country Director: "Part of the model was developed around how the market works in Kenya, where farmers own 100% of the factories, sit on the boards, and oversee the local factories, while the management is handled by a management firm."

Factories investment model





A worker at Mulindi monitors factory performance throughout the day

2.2 Early years: KTDA management (2012-2014)

> *Before the investors came, farmers didn't love tea because it had no benefits.*
>
> Alice Ntamitondero
> Tea farmer in Mulindi

EATI's bid was focused on the fact that its investment would be purely philanthropic and that EATI was backed by the track record of its two settlors (Sir Ian Wood and Lord David Sainsbury) in the corporate world. Initially, EATI also brought in the Kenya Tea Development Agency (KTDA) as a management agent with the requisite skills and understanding of processes to set up a functional tea operation. When EATI first took over the factories there were limited services being provided from cooperatives, too many staff within the factories, and processing lines that utilised outdated equipment.

In that initial period, KTDA brought in business acumen and experience running tea factories, set up key performance indicators and reporting structures, and updated all of the equipment. However, an in-house team eventually took over from KTDA to better streamline operations.

During this period, Imbarutso shifted its focus to supporting the two tea factories to increase farmer productivity. According to Mulindi's Field Services Manager, Gerald Gicheru: "Nobody wanted to talk to you about tea because of experiences they had growing the crop." Farmers themselves echoed this sentiment. Alice Ntamitondero, a tea farmer living close to the Mulindi factory says: "Before the investors came, farmers didn't love tea because it had no benefits." The team needed to make a concerted effort to bring farmers back into the business using a farmer field school approach as well as providing them with financial support through no-interest soft loans and grants for fertiliser and seedlings. The farmer field schools, funded with support from The Sustainable Trade Initiative (IDH), involved a one-year curriculum, covering everything from initial planting to field management and plucking. KTDA also had experience in this area, having run field schools for all of their factories in Kenya.

Tea being processed at Mulindi factory

2.3 TWFA management of the factories (2014-Present)

> *We brought in new people when needed but we also did on-the-job training and exposed staff to the industry so that they could learn. Slowly by slowly we will have people that can take over the running of the factories when we leave.*
>
> Benjamin Yego
> Mulindi Factory Manager

After TWFA took over direct control of the factories from KTDA, funding for the management of field services moved from Imbarutso to the factories themselves, and implementation moved from third party providers to factory management. Each factory now has a dedicated field services manager with a team of agronomists who support volume and quality improvements in the field, as well as deliver farmer field schools – all fully funded by the factories. This required a new relationship with the cooperatives where, in Mulindi's case, an MoU was agreed with one cooperative (Coopthé) to have farms managed directly by the factory. Coopthé's management could then focus on administrative and managerial issues, such as dealing with payments and organising field school attendees. All other farmer outreach activities were transferred to the factory.

The new management team also focused concerted effort on staff development, both in the factory and in the field. Mulindi's Factory Manager, Benjamin Yego, says: "We brought in new people when needed but we also did on-the-job training and exposed staff to the industry so that they could learn. Slowly by slowly we will have people that can take over the running of the factories when we leave." This is true of farmers as well, where the cooperatives' management has been through corporate governance training as well as a number of exposure visits to Mombasa, where East Africa's tea auction is based. Benjamin says: "We have exposed farmers to the tea business. 100% of the farmer leaders have gone through corporate governance training, even to lower leadership, and have been exposed to the value chain from field, factory, right through to the auction in Mombasa meeting tea brokers and buyers."

Green leaf entering Mulindi factory withering unit

To help manage factory logistics and transportation, new e-weighing scales have been introduced, which makes data on volume and incomes from green leaf much more transparent. Likewise, payments are now made on the 10th of every month, either directly to a bank account or via a savings and credit cooperative organisation (SACCO) organised by the farmer cooperatives. This has been well appreciated by farmers. Aloys Bizimawa, a farmer living near the Mulindi factory, says: "I get a receipt and this means that on a daily basis I am aware of how many kilos have been plucked." A number of farmers note that seeing the factories make timely payments with a clear pricing structure encouraged them to increase their focus on tea production relative to other crops.

> *I get a receipt and this means that on a daily basis I am aware of how many kilos have been plucked.*
>
> Aloys Bizimawa
> Tea farmer in Mulindi

This process hasn't been without its challenges. One issue has been the nature of historical tea production around the factories. According to EATI's CEO, John Cheruiyot: "The original tea had been planted in the marshlands - relatively very low-lying areas - where tea and its quality favour higher altitudes." For Mulindi, this has proven to be a major issue in the context of climate change, with floods and droughts increasingly common. They lost 100 hectares over the last two seasons due to flooding, which has meant needing to adapt. Mulindi Field Services Manager, Gerald Gicheru, says: "We had to re-strategise and decided to stop planting in the marshland and move to the hillside. Last year, we were able to distribute 1.6 million seedlings. This year we are developing 3 million seedlings that will be ready for planting." This new planting will equate to over 300 hectares of new high quality clonal tea and an additional 20% of planted area within the factory catchment.

A worker loads firewood into the boiler at Mulindi factory

Workers packing made tea at Mulindi factory

Another major issue has been energy usage, especially around fuel wood for the boilers. "Here where we are," explains Benjamin Yego, "We don't have a lot of land, and farmers are not growing trees to a reasonable level of growth due to competition for charcoal." This has meant a need to enhance efficiency and keep costs down through updating out-dated dryers, boilers and withering units. According to Benjamin: "We have now cut down firewood usage by 40%."

To address these issues, the factory management teams have relied on clear guidance from the board as well as having the right personnel in the right roles to understand and mitigate issues as they arise.

Factory outputs and profits are now up year on year and both factories are making strides towards improving quality through more efficient line management within the factories, updated equipment, better plucking and maintenance in the fields, as well as planting new clonal seedlings on the hillsides around the factories. Danton Vorster, a tea consultant formerly working with TWFA, sums the situation up well: "You have management teams out there that know what they're talking about, know what they're trying to achieve, and it makes all the difference. The people who are benefitting aren't just the farmers – it's the community, everyone!"

Mulindi will soon complete repaying the investment capital from GA and TWFA, and farmer shareholders have commenced discussion on an ownership transition. At both factories, farmers have been paid between 40-45% of the made tea price over the past few years, up from around 25% in 2012. Prices have also improved in relation to Mombasa auction averages, meaning that farmers are both receiving a higher proportion of the made tea price as well as higher prices overall.

2.4 Farmer service companies (2016-Present)

The first service company was formed in 2016 to supply a new greenfield concession in partnership with Unilever and supported by DFID. The second was developed in agreement with Indian tea firm Luxmi. The goals of the service companies are: to help overcome the high cost of planting out enough smallholder tea to enable new factories to be established; to provide services to farmers meant to increase their yield and quality of production to maximise profitability; and to act as intermediaries to support farmers' relationships with factories.

In 2014, GA and TWFA, in partnership with DFID and Unilever, started a farmer service company called the Njombe Outgrowers Services Company (NOSC) in Tanzania with the goal of supporting smallholder greenfield tea investments using patient capital, sound agronomic advice, and logistics services. In this arrangement, DFID provided up-front grant funding; GA and TWFA provided additional, interest-free capital as well as staff to manage the service company; and Unilever set up a new factory sourcing primarily from local smallholders. In this model, NOSC signed an off-take agreement with Unilever as the exclusive supplier of smallholder green leaf, guaranteeing the factory its supply and farmers a reliable market that pays a price premium for quality. By 2016, the model was progressing well and provided a blueprint for how to expand greenfield smallholder tea production in other contexts.

As with NOSC, the first of the service companies in Rwanda, Service Company Outgrowers Nyaruguru (SCON), was established as a partnership between DFID, Unilever, TWFA and GA. Shortly thereafter, Rugabano Outgrowers Services (ROS) was established as a partnership with Indian tea firm Luxmi and DFID involving a similar arrangement. As with the factories, these are long-term investments, with new planting over a 12-15 year period and investment repayments not expected to start until after year 15.[2] The companies also benefitted significantly from some up-front grant funding provided by DFID, which allowed EATI to set up operations without immediate pressure on capital.

For their part, Unilever and Luxmi have committed to invest in the construction of two tea processing factories and core estates in Nyaruguru and Rugabano. When the projects are in full operation, each factory will be supplied by more than 6,000 smallholder farmers, with tea planted on 7,000 hectares of land.

Farmer Service Company Investments

Service Company	Founded	Partners
NOSC Njombe Outgrowers Services Company	**2014** Tanzania	East Africa Tea Investments (The Wood Foundation Africa, Gatsby Africa); UKaid from the British people; Unilever
SCON Service Company Outgrowers Nyaruguru	**2016** Rwanda	East Africa Tea Investments (The Wood Foundation Africa, Gatsby Africa); UKaid from the British people; Unilever
ROS Rugabano Outgrowers Services	**2017** Rwanda	East Africa Tea Investments (The Wood Foundation Africa, Gatsby Africa); UKaid from the British people; Luxmi

[2] For more on the financing structure of the service companies, see this case study on NOSC

New tea planting around Luxmi factory in Rugabano

Services Company Outgrowers Nyaruguru (SCON)

SCON got off to a slow start. "It was really tough to change the mindset of farmers," says the Operations Director, Etienne Bihogo. "When we first came, farmers were showing us tea bushes that were abandoned." The team began by recruiting fresh talent out of university and sent them to Kenya to learn about running farmer field schools and good field management.

SCON farmer field school attendees celebrating on the day before graduation

According to Etienne: "Even if we only planted 70 out of the 150 hectares targeted in the first year, we wanted to make sure everything was really well done." This meant, firstly, providing clear guidance to farmers on what support SCON would and would not provide. Where previous projects had provided loans for seedlings/fertilisers as well as grants for land maintenance costs, SCON staff had to make it clear to farmers that they would be expected to maintain their own land at personal expense. While this was later changed to a loan for land preparation, initial messaging was important for setting the tone on how SCON was going to operate.

The next issues to resolve were developing a transparent payment system and running the farmer field schools. Commercial bank accounts were set up for all of the initial 86 farmers that were registered and SCON made sure to pay out loans for land preparation activities when they were promised. Recruited farmers were organised into groups of between 25-30 and taken through a year-long farmer field school training programme, which took them through all stages of tea farming, from initial planting to plucking and proper storage/transport of green leaf.

Farmers began to employ the skills they learned in the field schools and, because of good maintenance and excellent growing conditions, some were already plucking after 18 months. Historically, this takes closer to 3 years. For tea planted in 2017, farmers are now earning some money on a monthly basis, which has helped SCON in its drive to recruit other farmers in the community. "Farmers are watching their neighbours and are seeing them getting a regular income every month," says Etienne. In 2018, SCON was able to plant 150 hectares, in 2019 they planted another 242, and for 2020 they plan to plant 250 hectares.

Now, the team's attention is turning to collection and transportation logistics. The road network around Nyaruguru is still relatively underdeveloped and farmers are spread out on small plots, making collecting and carefully transporting green leaf to the factories challenging. To address this, the team is focused on creating clusters of production, recruiting farmers within close vicinity of one another to ease logistical constraints, and proactively mapping out new collection points where they will have a large number of recruited farmers.

SCON has been coordinating closely with local and national government to map out transportation routes and plan out new road works accordingly, which will require careful consideration. As Duncan Page, Head of Greenfields at TWFA, says: "Logistics and collection is the next phase and we have to make certain that we get this right. We have to liaise closely with the government when we position collection centres so that we balance convenience of farmer access with ease of access for collection vehicles, and this depends heavily upon the planned road infrastructure."

> *Logistics and collection is the next phase and we have to make certain that we get this right.*
>
> Duncan Page
> Head of Greenfields at TWFA

Tea fields in Nyaruguru with new road visible on the right

A tea plucker in Mulindi


ROS staff member giving advice to farmers

Rugabano Outgrowers Services (ROS)

The situation in Rugabano was much the same as in Nyaruguru when ROS began operating in 2017. There were no functional farmer organisations, and farmers were left without access to fertilisers or proper extension services. Additionally, ROS inherited some brownfield tea, so it had to focus on rehabilitating these plots on top of meeting its greenfield planting targets. As with farmers in Nyaruguru, many had left their tea bushes abandoned, focusing their energy elsewhere. ROS's General Manager, Frank Rwubuzizi, sums up the situation: "The first challenges we inherited were that farmers had no transport, no organisation, no factory and they were losing interest."

ROS partnered with the National Agricultural Export Board (NAEB) on a baseline survey to really understand what they were dealing with, both in terms of existing brownfield tea and opportunities for new planting, to have some guidance on where to focus. After this was completed, ROS's first task was to develop functional nurseries, where they developed 2.5 million tea plants for in-filling and new planting. The next step was to support farmers in rehabilitating existing tea fields.

ROS's service package resembles that of SCON. This involves a no-interest loan of up to 900,000 Rwandan Francs (roughly $950) for land development - as well as additional loans for seedlings and fertiliser - which farmers begin to repay gradually when the tea comes into bearing after 2-3 years. The proportion of the loan they pay back is set at a proportion of their green leaf rather than a fixed fee, to ensure that farmers take home as much as possible. In addition, farmers are given fertiliser and tea seedlings on no-interest credit, and access to extension services as well as the farmer field school. ROS then provides transport after harvest, which is chargeable at the end of the month. After Luxmi pays ROS, then ROS pays farmers through their bank accounts.

While building on learning from SCON, there have been early challenges as well, especially with nursery development, where there have been significant losses over the first couple of years of operation. According to Duncan: "We haven't yet arrived at a uniform nursery model for all projects. We haven't run it trouble-free for long enough in each project to say 'Right, this works! This is what we'll do throughout the schemes.' It's been done slightly differently each season and for each company. However, we are getting very close to being confident we have a system which works at each project." This will be a significant focus over the coming seasons. Another issue has been the nature of the landscape, which is extremely hilly, with farmers working on small plots closer to valleys. This makes accessing farmers with services a challenging and expensive endeavour.

Nonetheless, while ROS is the newest of the four investments, it is already showing some signs of progress. For example, 283 farmers have now graduated from its field school and the team has supported planting of 332 hectares over two seasons: 130 in 2018 and 200 in 2019. In total over 1,000 farmers have now registered with ROS. The team has also developed strong relationships with local government, which, as Frank notes, "is not tangible but is very important".

2.5 Imbarutso (2011-Present)

Imbarutso's sector development work is also ongoing, albeit taking up a much smaller portion of management time. This has been focused on:

- **A tea scholarship programme.** This trained 25 tea professionals in each cohort to eventually enter senior field and factory roles in the sector. It is now evolving into a partnership for a standard tea curriculum at the Howard Buffett funded Rwandan Institute for Conservation Agriculture (RICA).

- **An e-auction system.** Imbarutso has supported the GoR to move forward on the opportunity of creating a tea e-auction to provide an alternative market access point to Mombasa. An initial feasibility study has been undertaken with Imbarutso backing, and the idea is now moving to a pilot phase.

- **E-weighing and electronic payments.** Innovations such as electronic farmer payments and e-weighing scales have been successful in Mulindi and Shagasha and, with TWFA's support, roll out is being planned by the government to other factories in the sector.

The team has also had an indirect impact on the price floor being set by government, where the minimum green leaf price for farmers has moved from 40% to 50% this past season.[3] Issa Nkurunziza from the National Agricultural Export Board says: "We commissioned a study looking at the factories' cost of production, then had a meeting and decided as a sector to move from 40% to 50%." Having a seat at the table meant that the TWFA team was able to shape these debates. As Mulindi General Manager Benjamin Yego puts it: "Our focus has been on the farmers. Now, either willingly or unwillingly, other factories have to give more to the farmer." TWFA and GA had also engaged in the process of developing the initial pricing formula, contributing to a 2012 World Bank study that informed the GoR's position to tie farmer payments to the made tea price.

Green leaf being weighed

By being there and sitting on the side of the farmers, we've been an agent of positive change in the sector.

John Cheruiyot
EATI CEO

[3] 45% to farmers and another 5% needs to be set aside for productivity enhancing initiatives that farmers benefit from.

3. IMPACT TO DATE

Firstly, and most importantly, the investments have been able to enhance value for farmers through production increases at the farm, better prices at auction, an increase in the made tea percentage received by farmers, as well as a bonus payment at the end of the season. The table below summarises drivers of farmer value before discussing each throughout the text below.

How our investments drive value for tea famers

Driver of value for farmer	Key contributing factors
Increases in farm production through better yields, new planting and field management	• Field management (agronomic support & plucker organisation) • Farmer field schools • Seedling provision for new planting on credit • Access to fertiliser on credit • Improved farmer motivation to produce tea
Price increases at auction	• Quality field management leading to improved quality of leaf supplied • Improved factory management, improving quality of made tea produced • Effective marketing with key buyers
Increased percentage of made tea price received by the farmer as well as bonus payments	• Increased factory profitability driven by increased production, factory efficiency and better quality made tea • Company incentives to translate above to shared value for farmers • A government mandated increase in the made tea percentage paid to farmers

Mulindi

There has been steady improvement in field management from the time farmer field schools were first introduced. According to Danton Vorster, a tea consultant formerly working with TWFA, this has been due to improved husbandry practices (as farmers have been supported with better agronomic oversight), better relationships with cooperatives, and tighter control on plucking with the switch from scheme to gang plucking. Annual green leaf intake for the factory has steadily increased, partly due to new planting, from roughly 13.6 million kgs in 2010 to 17.5 million kgs from April 2019 to March 2020. All of this is leading to improved tea quality, with the percentage of quality green leaf edging up slightly year on year.

Figure: Mulindi percentage of made tea deemed quality over time

Period	Coopthé	Coothevm
April 2018	60%	58%
April 2018 to March 2019	62%	61%
March 2019 to 12 January 2020	62%	62%

> We are now able to afford medical and life insurance in case of emergencies, due to the money we are getting from tea.
>
> Charles Kibera
> Tea farmer in Mulindi

There have also been major improvements in terms of factory performance, where TWFA management has been able to increase factory capacity from an initial output of 60 tonnes per day at takeover to 100 tonnes a day. This was due in large part to improved operational routines in the factory, updating drying and withering equipment, as well as adding a third production line, all of which have reduced cost of production and enhanced efficiency.

As a result, profits have been up year on year and quality is steadily improving. Over the past four years, Mulindi has averaged a selling price of $2.41 a kilo for made tea at the Mombasa auction, up from an average of $2.17 during the previous four. This has put the factory in a position where it will soon be able to pay back its loan to GA and TWFA and enter a phase of ownership transition to farmers via their cooperatives, Coopthé and Coothevm. Last season, Mulindi was also able to pay out $500,000 as a bonus to farmers from factory profits, over and above payments for green leaf deliveries.

Over the course of March 2019-2020, this translated to an average per hectare gross income of $2,175 per annum, up from $1,412 over the course of 2013. This has all had tangible benefits on farmers' lives. Charles Kibera, a tea farmer in the Mulindi area, says: "We are now able to afford medical and life insurance in case of emergencies, due to the money we are getting from tea." Aloys Bizimawa, another farmer in the area, adds: "We now have better livelihoods and can afford school fees."

Made tea waiting to be exported from Mulindi factory

Shagasha

The story in Shagasha has been much the same as Mulindi, albeit with a slower repayment schedule planned due in part to the quality of tea planted in the region, as well as an initial miscalculation of how much tea was actually there already. According to Danton: "They thought they were taking over a plantation on the Coopthé side that had 10,000 bushes per hectare, but it was only 7,000." Furthermore, he explains: "When the tea was first planted, they used seed. They didn't actually look at it and say 'Where is the mother bush?' So, when you're there, you can count five, six, seven different types of bushes all next to each other, right next to you." This has meant that there are a variety of different sized bushes rather than a consistent 'table', which makes plucking challenging.

Nevertheless, yields have steadily increased since the initial investment. One big improvement has been in terms of plucking rounds, which have increased from every 14 or 15 days (i.e. twice per month) two years ago, to the current 10 to 12 days (i.e. three times per month). This means that tea is being taken off the fields now more efficiently, where some fields were previously being abandoned due to a shortage of pluckers.

Better field management has translated into better quality and greater yields. Green leaf intake for the factory has increased from 8.5 million kgs in 2010 to 10.6 million kgs this past year. Over the past two years a great deal of work has been undertaken by management to improve the transportation of green leaf from field to the factory, reducing damage in transit and further increasing leaf quality.

Figure: Shagasha percentage of made tea deemed quality over time

Period	Coopthé	Coothevm
April 2018	56%	62%
April 2018 to March 2019	63%	64%
March 2019 to 12 January 2020	63%	66%

Farmers dancing at a 'Baraza' – an event bringing together the farmers and the factory to celebrate the success of the factory investment to date

Overall factory production is up 22% since 2013, due to the addition of a third sorting line. There has also been a focus on improving withering and drying where, over the past two years, the management team has experimented with two very different dryers that need constant and careful monitoring. The team hopes to continue improving and win buyer confidence by producing consistent quality, aiming to move out of the 'medium' category in Mombasa into 'good'. Over the past four years, Shagasha has averaged a made tea price of $2.49 per kilo, compared to $2.07 for the previous four.

Since 2013, annual gross income per hectare has increased from roughly $1,061 in 2013 to $1,600+ this past year, with spillover benefits in terms of improved incomes and better livelihoods. Farmers have appreciated this and, at the two 'Barazas' (celebrations) hosted by the factories, over 9,000 farmers attended to show their appreciation for the investments.

A plucker working in Rugabano


Tea being bagged and sent to the factory

Service companies

While the service companies have only been in operation for three and two years respectively, there are some promising early results in terms of farmer recruitment, planting targets and signs of initial productivity increases. As of March 2020, close to 1,600 farmers had been enrolled in farmer field schools and 2,085 farmers had been supported to plant out tea. The service companies have managed to plant out 850+ ha of greenfield tea, utilising over 11 million seedlings – a massive undertaking that has contributed thousands of seasonal jobs to the local economy. At full production, assuming the tea fetches similar prices to Mulindi and Shagasha - which is conservative given this is new planting - farmers will receive an average $4,000 an annum per hectare. Danton says: "What has been amazing is the speed with which the bushes have established and developed in the field to the point of being plucked within two years." Productivity for rehabilitated brownfield has also improved greatly, where, between October to December 2019, 60 tonnes of green leaf was harvested from ROS farms, a 21% increase over the same period in 2018.

For SCON, farmers that began planting in 2017 are already receiving a regular income. For example, Antoine Bosco, a farmer that registered early with SCON, is now harvesting 300 kgs a month from 0.57 hectares, and earning a steady monthly income of 53,000 RWFs (roughly $57) already from his planting. He is not alone. 40% of SCON's 2017 cohort, and 30% of SCON and ROS's 2018 cohort, have recently reported increased incomes as a result of new planting. Rob Unwin, Gatsby Africa's Deputy Director for Tea and a board member for SCON and ROS, says: "Even though we're only a couple of years in and it's early stage plucking, people are making more money from tea than they did before from their other crops. Considering production is only at less than 20% of potential, it's going to be game-changing!"

It should also be noted that the service companies are an essential part of supply for factories being set up by Luxmi and Unilever – Luxmi's first tea investment in Africa and Unilever's first tea investment in Rwanda. In 2019, Luxmi opened a factory to start processing brownfield tea. Both service companies have negotiated a price mark-up for farmers as part of these investments. In both cases, the service companies played a significant role in buying down risk on the part of the investor by guaranteeing supply, managing new planting, and taking on the risk of directly financing farmers.

The greenfield projects have also contributed to local employment in a rurally impoverished area. To date, SCON and ROS have contributed to improved livelihoods for more than 3,000 farmers in the area and there have been peaks of seasonal employment (for plucking, nursery development, construction) where an additional 6,300 people have found work. All of this has a spillover benefit in terms of economic development, with more money entering the rural communities.

Impact on the Rwandan tea sector

Currently the two factories are supplied by 9,400 smallholder farmers and account for over 20% of total made tea production in Rwanda. When SCON/ROS reach their planting targets, supplying Luxmi and Unilever factories, this contribution is likely to reach 22.5 million kgs. For comparison, Rwanda's entire tea exports equated to 30.5 million kgs throughout FY 2018-2019.[4]

Figure: Potential of future operations at scale (illustrative)

Investment	Hectares	Farmers	Made tea production / kg
Mulindi	1,718	3,800	4,892,222
Shagasha	1,399	5,600	3,236,425
Total factory	**3,118**	**9,400**	**8,128,647**
SCON (Unilever)	3,415	6,830	6,606,250
ROS (Luxmi)	4,000	7,356	7,753,625
Total service company	7,415	14,186	14,359,875
Total EATI	**10,533**	**23,586**	**22,488,522**

The partnership also has an opportunity to shape how farmer services are provided across the tea sector in Rwanda, where it is clear NAEB are watching what SCON and ROS are doing closely to see if they provide a model NAEB can replicate elsewhere. As Issa Nkurunziza of NAEB puts it: "Within five years, we are going to compare the service companies to existing cooperatives. From there we can build a case. Our country has a big vision to increase per capita income from $800 to $1,400 per annum [...] To achieve this we need to keep being efficient and improve on what we're doing." There are ongoing discussions about future service companies as a means of channelling government funding into planting out large amounts of quality tea efficiently.

[4] Figure taken from NAEB

4. REFLECTIONS AND RECOMMENDATIONS

4.1 Reflections

The pros and cons of an investment-led approach

An investment-led approach is great for building credibility in a sector. According to David Knopp, Director of Africa at The Wood Foundation: "You're taken much more seriously by the industry and government when you're an investor. They see you walking the talk, as understanding the real issues. This allows you to build relationships with both government and the private sector to nudge the industry along."

It also forces staff to focus on tangible results. David says: "It's hard to measure progress of a one-off programme or matching grant, especially in terms of behaviour change. Here, you can see real impact on the ground." This is tied to a necessity to use commercial principles in order to sustain success and impact.

However, this type of approach is not without its drawbacks. For example, it means that there are roles that a facilitator could play that are out of bounds for an investor. As David notes: "There are some policy issues we can't engage with, as we're a vested interest." Related, with an investment-led approach, you have less time to commit to addressing sector-wide challenges as management time and energy is geared towards ensuring investments are successful. Likewise, initiatives such as farmer field schools will tend to be directed at supporting investments as opposed to being offered as a public good.

It is also a long-term and high-risk way to approach development. While EATI is clearly a major player in the Rwandan tea sector, this approach has cost £20+ million and involves a 15+ year commitment. While the factory investments have clearly paid off - both in terms of paying back upfront investment and in impact on farmers - it is too soon to draw definitive conclusions about the service companies.

While not necessarily positive or negative, investing also requires a different skill-set to facilitation, with more emphasis on operational skills and less on roles focused around policy engagement or research as would be more common for market development programmes.

Worker placing tea in withering unit

Tea is tasted at Mulindi factory once hourly to ensure consistency and to check for abnormalities

> *I can't think of a model being tried like this elsewhere, certainly not for tea.*
>
> Sanjay Kumar
> Former TWFA Rwanda Country Director

The path to long-term sustainability

What this partnership is trying to achieve - in terms of turning around underperforming factories and transitioning them to farmer ownership - is unique in many ways. As Sanjay Kumar, former TWFA Rwanda Country Director, notes: "I can't think of a model being tried like this elsewhere, certainly not for tea." This means that a ready-made blueprint for how to manage this transition does not exist. In practice, this has involved tackling performance issues first and then slowly trying to address the governance side of things. Rob Unwin, Gatsby Africa's Deputy Director for Tea, says: "We didn't give farmers control on day one or try to map out the exact future with a clear roadmap. Instead, we knew where we wanted to get to in terms of farmer ownership and impact and sequenced our efforts to address critical challenges up front. I think this is an important lesson. Getting performance up was hard enough, and required high quality people from a range of disciplines. This has built respect with leaders, farmers and government."

As Mulindi has now paid back the majority of its loan from EATI, the team is thinking very seriously about how to transition control while also ensuring that farmers remain the primary beneficiaries of the factory's success going forward.

4.2 Recommendations

For other philanthropic investors inclined to adopt a similar approach in tea or other sectors, the following offers some guidance on how to approach both factory and greenfield investments.

1. Utilise commercial principles

Even though the four investments are made using philanthropic funding, they are managed like any other commercial investment. This brings focus and discipline to decision-making, which, in turn, has contributed to the partnership's effectiveness. As Danton Vorster, a tea consultant formerly working with TWFA, notes: "If I went to a factory in Kenya or India or elsewhere, what I see in Mulindi and Shagasha is the same. You see tight controls on cost of production, and an emphasis on efficiency and improving quality."

2. Hire the right people

Related, an emphasis on commercial principles has meant hiring the right people, who understand the business and have experience in putting good management principles into practice. The factory managers are all experienced tea professionals who had worked in commercial factories for years (and sometimes decades) before transitioning to TWFA. EATI's CEO formerly worked for Unilever; TWFA's Head of Greenfields managed a large tea operation in Tanzania; SCON's Operations Director had previously established the Rwandan Smallholder Specialty Coffee Company; and its outgoing Country Director previously worked for Taylors of Harrogate. These individuals brought in expertise and experience to build the next generation of Rwandan tea professionals. Along with bringing in the right people, the boards and GA and TWFA staff have played an oversight function throughout, providing strategic challenge and suggestions for mitigating issues as they arise.

A tea plucker in Mulindi

3. Get and keep farmers on your side by demonstrating your value to them

Across all four cases, farmers and farmer representatives spoke about conditions in the tea fields before EATI investments. "For farmers to like tea again," explains Jean-Pierre Nkurunziza, a farmer representative for Shagasha, "they had to see that it can be profitable." This required concerted effort in all cases to be clear and transparent with farmers about what was being provided and why, what was expected of them, and what they could expect as a result. Following through on commitments was crucially important at the early stages of all investments, as communities had all been disappointed by past initiatives. Many initially sceptical farmers have now been convinced to grow tea after seeing their neighbours being paid a decent income in a timely fashion and receiving a bonus.

Now, farmers are concerned about what happens during the management transition. Many have expressed a preference for continued EATI involvement in the running of Mulindi and Shagasha. Pascal, a farmer near Mulindi, says: "We humbly request that the investor keeps managing the factory – we are getting benefits." While the purpose of the investment was never to retain ownership, these sentiments point to a high degree of earned trust amongst the local community.

Farmers performing a traditional dance at the Mulindi Baraza to celebrate the factory investments

4. Be patient and committed while remaining open to new opportunities

Investments such as these are not for those seeking quick returns or impact targets. The turnaround of the privatised tea factories has taken 8-9 years to repay investment capital with zero interest, but has already had significant impact. The service companies are expected to take 25+ years to completely pay back the initial investment from EATI. In the context of volatile markets and a changing climate, this return is also far from guaranteed. It has required an enormous amount of work to develop and maintain this portfolio, and is not an approach to be considered for those looking to be passive investors.

This determination needs to be balanced with an openness to adapt approach. "Don't be rigid," notes Sanjay. "Have a decent idea of what you want to do, but be flexible." There will be a host of unforeseen challenges, from broad issues like changing climatic conditions and global market fluctuations, to the more mundane breakdown of a boiler. This makes a pre-defined business plan that's simply executed against an impossibility. As David notes: "We see our work in Rwanda as a portfolio of plays – we have to do different things at different times and be responsive to the market."

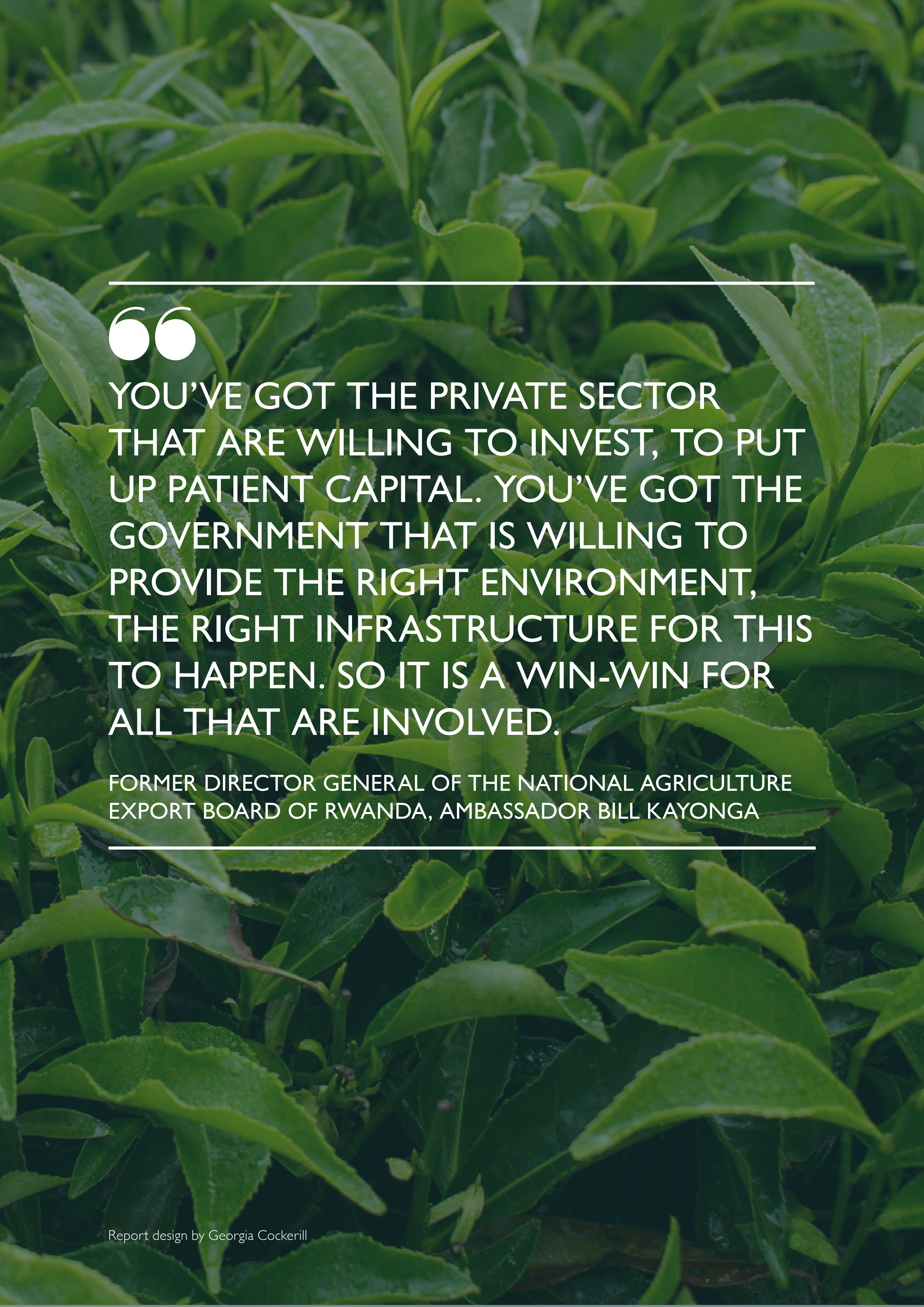
5. Have the right partners by your side

This type of approach requires having partners with you throughout. In this case, the GoR has been proactive within the sector in driving changes, seeking partnerships to support its vision, and responding to the needs of investors. DFID has also played an instrumental role in providing £11.8 million in grant funding to the service companies, which has given them time to set up operations appropriately without immediate pressure on EATI's capital. Having these partnerships in place has also allowed TWFA staff to be in a position to influence wider sector discussions with a view to drive benefits for smallholder farmers. The right commercial partners with a genuine commitment to small farmer development are also essential to work through the inevitable challenges and align the farmer support with the industrial investment required.

5. WHAT'S NEXT FOR THE RWANDAN TEA SECTOR?

The Government of Rwanda has ambitious goals, from reaching total export volumes of $1 billion per annum by the middle of this decade, to increasing per capita income to $1,400 per annum. Both TWFA and Gatsby have a positive role to play in seeing these ambitions become reality. TWFA have expanded their presence in the tea sector, recently partnering with Luxmi to acquire majority stakes in three more largely smallholder-supplied factories - Rugabano, Pfunda and Gisovu - with TWFA focused on working with farmers to improve quality and yields and Luxmi focused on factory production. This provides an opportunity to combine a factory investment model in a lighter-touch manner with a world-renowned tea company as partner. Unilever, GoR and TWFA are also looking at developing a second phase of greenfield expansion on the service company model, with another Unilever factory to be set up in Nyaruguru. These investments highlight improved confidence in tea as well as the value of GA and TWFA's de-risking model. Gatsby Africa and The Wood Foundation Africa remain excited about the Rwandan tea sector's future – and committed to it for the long haul.

Recent farmer field school participants celebrating at their graduation



YOU'VE GOT THE PRIVATE SECTOR THAT ARE WILLING TO INVEST, TO PUT UP PATIENT CAPITAL. YOU'VE GOT THE GOVERNMENT THAT IS WILLING TO PROVIDE THE RIGHT ENVIRONMENT, THE RIGHT INFRASTRUCTURE FOR THIS TO HAPPEN. SO IT IS A WIN-WIN FOR ALL THAT ARE INVOLVED.

FORMER DIRECTOR GENERAL OF THE NATIONAL AGRICULTURE EXPORT BOARD OF RWANDA, AMBASSADOR BILL KAYONGA

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