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Opportunities to Enhance the Competitiveness of Malawi's Tea Industry: Evidence from an Analysis of the Tea Value Chain

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Introduction

Tea is a significant employer and foreign exchange earner for Malawi with the industry directly employing approximately 50,000 workers (permanent and seasonal) and earning about US \$70 million in export earnings for the country in 2016. Tea is among the top 3 export earners for Malawi and has competed with sugar for the second position, after tobacco, since 2010. Tea contributes an average of 6 % to total Malawi export earnings, based on Trade Map data. The industry further provides a livelihood for over 17,000 smallholder growers. In a general equilibrium model to identify priority value chains for Malawi, tea was ranked among top five value chains that are effective in creating employment and reducing rural poverty (Benfica and Thurlow, 2017). Despite its apparent strategic value to the country's economy and export earning potential, the Government of Malawi (GOM) has yet to prioritize development of the tea industry.

To better understand and inform appropriate investments in the agriculture sector, the GOM has drafted the National Agriculture Investment Plan (NAIP) which relies on an evidence-based approach to prioritize investment opportunities within the sector. Part of the evidence-based approach is to conduct comprehensive value chain analyses for several priority value chains, identified for their potential to unlock investment opportunities and contribute to increased foreign exchange earnings and domestic employment. One of the priority value chains identified for further investigation is tea, given the country's favorable production conditions for this crop. Using value chain analysis, this study sought to address two key questions relevant to Malawi's tea industry and the country's policymakers:

- Given the constraints the industry faces, can the Tea industry in Malawi improve its competitiveness in the global tea market?
- What are the opportunities and threats to the expansion of the Tea industry in Malawi?

Key Findings and Recommendations

- The study found that the market for black tea is oversupplied at a global level, putting downward pressure on real tea prices in Malawi;
- There is no clear way for the tea industry in Malawi to improve its competitiveness. Development of the smallholder grower sector is limited by scarcity of land in the production hub (Thyolo and Mulanje). Increasing productivity of the smallholder sector is one way of expanding the tea industry. Large estates are mainly constrained by large tracts of their estates having old tea plantations that are low yielding. Uprooting of these plantations for new higher yielding plants is limited by competition from Macadamia as a more profitable substitute and heavy investment requirements.
- Smallholder growers in Malawi make a significantly lower margin than estates;
- To enable expansion and improvement in competitiveness, public investment should focus on unlocking 'bottlenecks' caused by issues around seedling supply, costs of and access to finance, a lack of extension services, and land tenure security for both smallholders and large estates;
- Opportunities for the integration of smallholders into the tea industry value chain through ownership and participation in tea processing should be identified and viable options should be pursued;
- To encourage increased private investment, an assessment of production suitability at country-level for all tea varieties is required to identify new areas for expansion and investment.



Methodology and Data

Given the intended outcomes of the assignment, the authors adopted the ValueLinks 2.0 approach to value chain analysis to guide work undertaken during the assignment. ValueLinks 2.0 comprises several modules which should be completed to conduct an analysis of a value chain and provide recommendations for value chain upgrading. Of the modules available, elements of the following four modules were applied for the analysis:

- Module 1 – Value chains and development;
- Module 2 – Analyzing a value chain (value chain mapping, quantifying and analyzing a value chain in detail and economic analysis of value chain);
- Module 3 – Determining a value chain upgrading strategy (analyzing opportunities and constraints and identifying key actors and anticipating the impacts of upgrading); and
- Module 4 – Facilitating the value chain development process.

Standard interview questionnaires were designed for actors within the tea value chain. Included in the sample were the following key actors in the tea value chain:

- The Tea Association of Malawi (TAML) representing the tea estate sector;
- The Tea and Coffee Merchants Association (TCMA);
- The Sukambizi Association Trust (SAT) representing 9,000 smallholder tea growers;
- The Mswadzi Tea Association representing 187 smallholder tea growers;
- Four commercial tea producer-processors; and
- The Tea Research Foundation for Central Africa (TRFCA).

Findings

Value Chain Mapping and Analysis

The tea value chain is partitioned into three main nodes: production, processing and marketing (Figure 1) and is described as follows:

- Globally, there are four main types of tea: black tea, green tea, oolong tea and white tea.
- The most common teas in global markets are green tea and black tea.
- Malawi produces predominantly medium grade black teas that are classified as crush-tear-curl (CTC).

- Malawi tea is largely grown under rain-fed conditions by commercial estates and smallholder out-growers.
- Approximately 92% of the green leaf tea is harvested from December to May;
- Tea is produced on a total area of approximately 18,000 ha with the commercial or estate sector accounting for roughly 89%, and smallholders 11%, of this total area (Cameron and Mkomba, 2014). In 2017, the commercial or estate sector accounted for 93% of total annual tonnage of tea produced, with smallholders accounting for the remaining 7%¹
- Certification bodies such as Fairtrade, Rainforest Alliance, Ethical Tea Partnership operate with the production node to ensure compliance, for estates and smallholder growers, with ethical certification standards;
- Smallholder grower associations e.g. Sukambizi Association Trust, Thuchila Tea Association and Mswadzi Tea Association have supply or offtake agreements/contracts to supply estates, with growers themselves contracted to their respective association;
- All processing and grading activities are carried out by factories linked to commercial estates;
- From the tea factory, estates have numerous marketing channels namely: sale via the auction floor at the Limbe Auction; direct sale to an international or local buyer/packer; or further value addition and direct sale to a retail chain store;
- Buyers and packers then arrange for either export or packing/bagging of the tea for sale in international and/or local end markets;
- There are numerous value chain supporters including Non-Governmental Organizations, Government of Malawi, and producer associations who provide oversight, regulation and monitoring of product quality and standards across different value chain activities;
- Geographically, the tea production, processing and marketing hub is heavily concentrated in the Southern Region of Malawi, specifically the Thyolo, Mulanje and Blantyre districts (Figure 2).

Figure 1 presents a value chain map for tea in Malawi.

¹ Information obtained from the Tea Association of Malawi (TAML) during field consultations

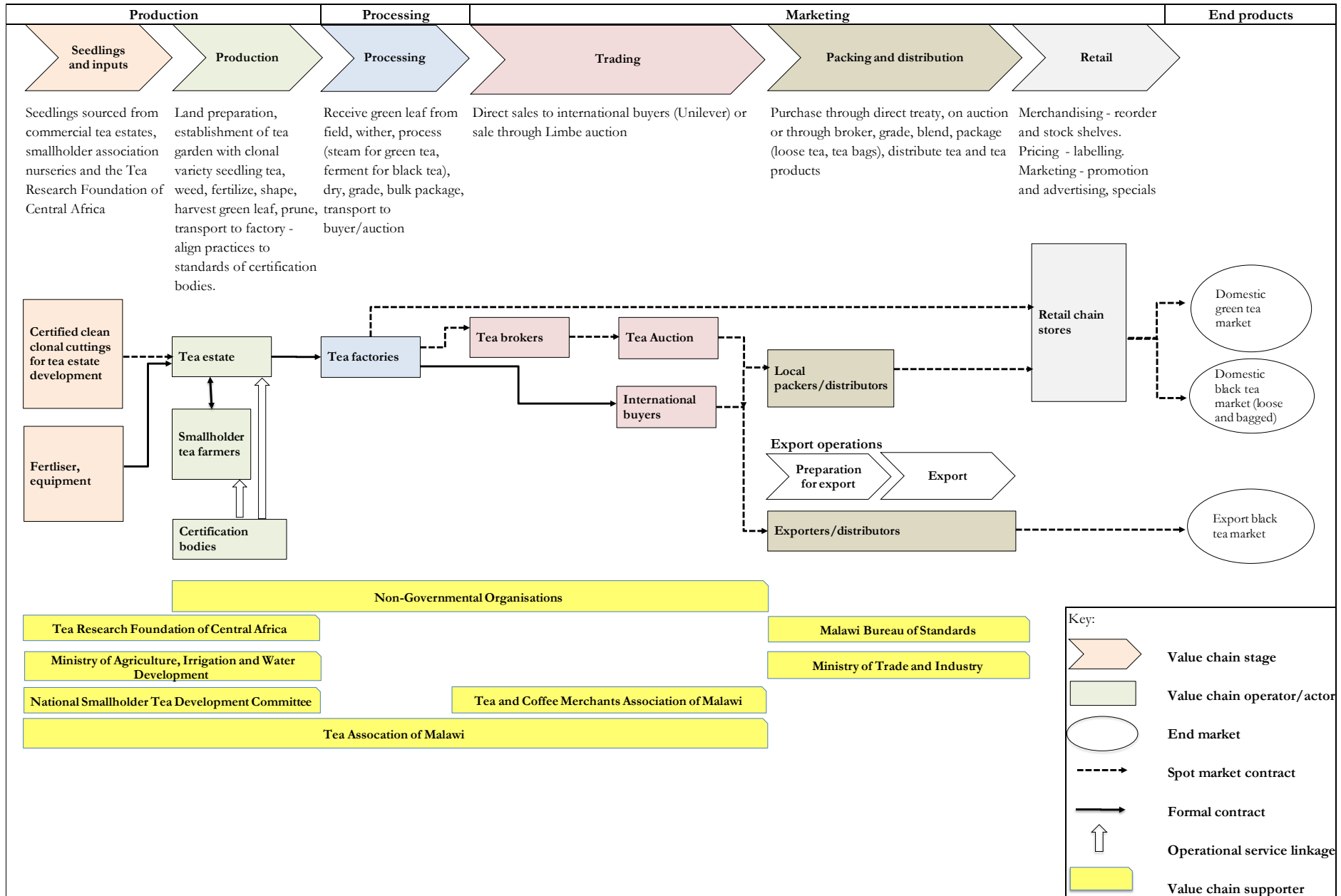
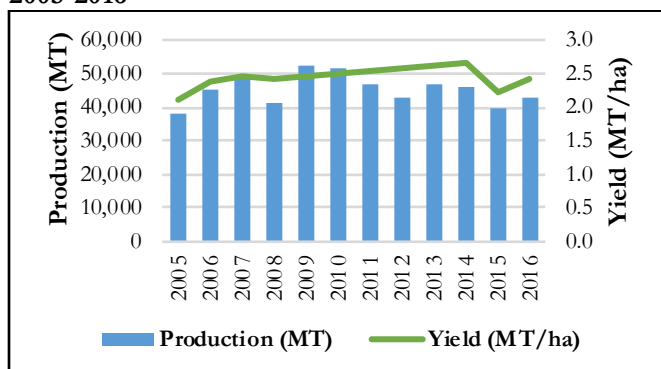


Figure 1: Tea value chain map, Malawi

Figure 2 shows stagnant tea production and yield trends in the past decade.

Figure 2: Tea production and yield trends in Malawi, 2005-2016

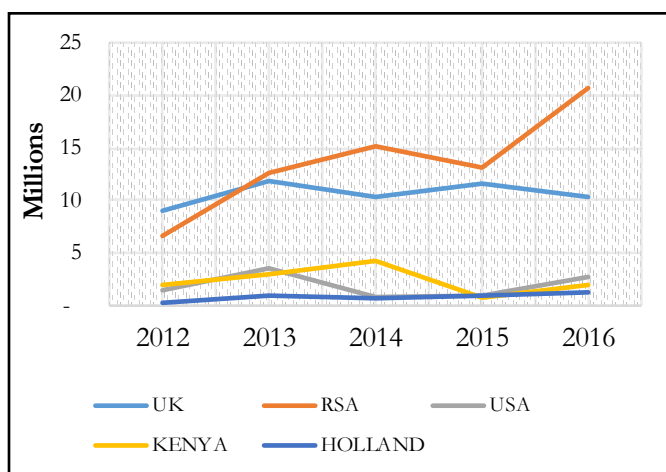


Source: Tea Association of Malawi (TAML) (2017) and FAOSTAT (2018)

Tea Marketing in Malawi

The marketing of tea in Malawi typically takes place via 3 channels: (i) sale via the auction floor at the Limbe Auction, (ii) direct sale to an international or local buyer/packer and (iii) further value addition and direct sale to a retail chain store. However, approximately two-thirds of tea produced in Malawi is sold directly to buyers through direct contracts with the remaining one-third of total volume sold via auction at Limbe. The marketing node is dominated by a few multinational companies such as Unilever, Tata Tea, Van Rees and James Finlay. South Africa (RSA), the United Kingdom (UK), the United States of America (USA), Kenya and Holland have been major export destinations for Malawian teas over the period 2012 – 2016.

Figure 3: Malawi tea export values by major importing countries



Source: TAML (2017)

Exports to South Africa have substantially increased over this period. However, interviews with key informants

revealed that most of these exports come back to Malawi as rebranded imported tea (e.g. as Five Roses). The Malawi tea is often used by importing countries for blending with other teas due to its suitability for this purpose.

Analysis of Marketing Margins

Results from our profitability analysis (Table 1) indicate that smallholders make a significantly lower margin as compared to commercial/estate growers within the value chain, largely because they only produce green leaf tea, the price of which is established annually by an independent pricing committee. There is an opportunity for further integration into the value chain by local producer-processors and smallholders that may result in higher returns. Commercial estates are vertically integrated into the tea value chain and all estates have processing facilities where green leaf is delivered. Estates act as a single channel market for smallholder growers who neither individually nor collectively own processing facilities nor have means of processing their tea.

Figure 4: Overview of tea production and processing areas in Malawi

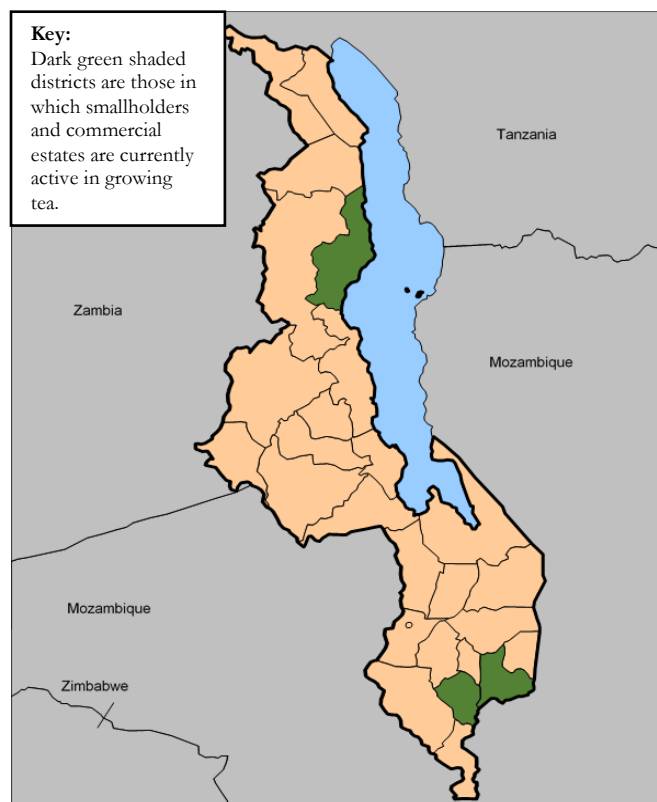


Table 1: Summary of marketing margins for smallholders and estates, 2016/17

	Malawi Kwacha/kg	US \$/kg
Production costs (smallholder growers) (green leaf)		
Green leaf: made tea = 4.57:1; yield of 8,000kg/ha		
Pre-harvest activities		
Weeding: labour	26.25	0.04
Fertiliser application: labour	0.64	0.001
Fertiliser application: materials	20.00	0.03
Pruning: labour	7.98	0.01
Harvest activities		
Harvest: labour	25.00	0.03
Harvest: materials	0.75	0.001
Total costs to produce green leaf	80.61	0.11
Green leaf price (including bonus payment)	118.175	0.16
Margin per kg green leaf	37.56	0.05
Production costs (Estates) (made tea)		
Field costs: labour	297.25	0.41
Field costs: materials	159.5	0.22
Total field costs	456.75	0.63
Processing costs (made tea)		
Factory labour cost	36.25	0.05
Factory processing cost (including green leaf purchase)	181.25	0.25
Ex-factory cost (made tea)	674.25	0.93
Broker fee	20.23	0.03
Levies (CESS)	9.79	0.0135
Transport and logistics costs	116.00	0.16
Ex-auction price	820.27	1.13
Auction Price	1,152.75	1.59
Estates' Margin (per kg made tea)	332.49	0.46

Source: Author's analysis. Note: \$1 = 725 Malawi Kwacha

Value Chain Opportunities

The study identified the following value chain opportunities.

- Expansion of tea industry can be driven by improvements in quality and yield of smallholder growers;
- Increased replanting rate of tea plants on existing estates through flexible, affordable and innovative can also drive improvements in tea yields;
- There are value addition opportunities due to concentration at the processing level of the value chain. Smallholder ownership of processing

facilities should be investigated, and feasibility established e.g. through Public-Private Partnerships;

- Increased visibility of the industry through coordinated marketing campaigns could provide access to new markets; and
- There are numerous product diversification opportunities that could be pursued, e.g. production of green tea varieties.

Value Chain Constraints and Threats

The following value chain constraints and threats were identified:

- The industry is concentrated in a specific geographic location of the country, particularly in the production hubs in the Thyolo and Mulanje districts. This presents a constraint to expansion of the estate sector, exacerbated by a rapidly growing population and reported scarcity of suitable land for tea production.
- There is a lack of sufficient and quality tea seedlings available to smallholder growers;
- The effects of global climate change resulting in changes to rainfall patterns are affecting tea production and quality;
- Tea production is projected to increase globally, while consumption is projected to increase at a lower rate creating conditions of oversupply in the global market. This will continue to exert pressure on global as well as local tea prices. This may result in increased producer exit rates and consolidation of existing commercial operations;
- An estimated 60% of Malawi's tea bushes in the commercial sector ($\pm 11,000$ ha) are older than 50 years and are due to be replaced. Ageing tea bushes contribute to a decline in the quality of tea, impacting on buyer perceptions and providing competing countries a quality and price advantage in the global tea market;
- The high cost of and unreliable electricity supply lending are some of the factors hindering expansion of the tea sector.

Conclusion and Recommendations

The objective of this study was to address two questions relating to the competitiveness of the tea industry in Malawi. These questions were as follows:

- Given the constraints the industry faces, can the tea industry in Malawi improve its competitiveness in the global tea market? and
- What are the opportunities and threats to the expansion of the tea industry in Malawi?

There is no clear way for the tea industry in Malawi to improve its competitiveness. Development of the smallholder grower sector of the value chain is limited by scarcity of land in the production hub (Thyolo and Mulanje). However, increasing productivity of the smallholder sector is one way of expanding of the tea industry. Large estates are mainly constrained by large tracts of their estates having old tea plantations that are low yielding. Uprooting of these plantations for new higher yielding plants is limited by competition from Macadamia as a more profitable substitute and heavy investment requirements.

The following interventions are proposed to improve competitiveness of the tea value chain:

- 1. Support the Tea Research Foundation of Central Africa** to increase seedling supply, access to extension services and improve the quality of green leaf produced through:
 - a. Funding for development activities targeting smallholder growers.
 - b. Skills development.
 - c. Research grants.
- 2. Smallholder integration** into the tea industry value chain through ownership and participation in tea processing should be identified and viable options pursued. The feasibility of a suitable entity that owns a central tea processing facility dedicated to the processing of smallholder green leaf option should be further investigated.
- 3. Create an enabling and attractive environment for investment**
 - Immediate and urgent interventions to address the unstable electricity supply.
 - Clarity and certainty around the issue of land expropriation to increase investor confidence.
- 4. More aggressive and proactive marketing**
The TAML, in conjunction with the TCMA, need to aggressively promote tea consumption within Malawi to offset declining demand from traditional markets.

5. Addressing financing gap in estate sector

Increased priority should be given to financing the substitution of old tea plantations with younger, higher yielding, hardier varieties to remain competitive based on quality with competitors such as Kenya and Uganda.

6. Unlocking new production areas

To encourage further private investment, an assessment of production suitability at country-level for all tea varieties is required to identify new areas for expansion and investment.

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