

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

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Enhancing the competitiveness of the tea industry value chain

Introduction

Study context

- Tea is a significant employer and foreign exchange earner for Malawi -- employing approximately 50,000 workers (permanent and seasonal) and earning US \$76 million for the country in 2016
- Tea was Malawi's second largest export earner (**8%** of export earnings) after tobacco (**60%** of export earnings) in 2016 -- competed with sugar for this position since 2010
- Tea contributes to the livelihoods of over 17,000 smallholder growers
- Despite its apparent strategic value to the country's economy, the Government of Malawi has yet to prioritise the development of the tea industry

Study objectives

- To accurately describe the tea value chain in Malawi
- To identify the key actors within the value chain
- To produce a value chain map that shows the horizontal and vertical linkages between the various actors in the value chain
- To evaluate the performance of the value chain at different levels by detailing the opportunities and constraints faced at each level
- To trace movements in post farm gate margins over time

Methodology

Column one

- Module 1 - Value chains and development
- Module 2 – Analysing a value chain
- Module 3 – Determining a value chain upgrading strategy
- Module 4 – Facilitating the value chain development process
- See <http://valuelinks.org/manual/> for more detail

Column two

- Quantitative and qualitative data were gathered from Key informant interviews and Focus Group Discussions
- Included in the sample were:
 - The Tea Association of Malawi
 - The Tea and Coffee Merchants Association
 - Smallholder Tea Gower Associations repr. ± 9,000 growers
 - Three commercial tea producer-processors
 - The Tea Research Foundation for Central Africa

Column three

The following analyses were conducted:

- Functional and structural analyses of the tea value chain including mapping of the tea value chain
- An industry strengths, weaknesses, opportunities and threats (SWOT) analysis
- A basic assessment of the marketing margin for actors within the tea value chain to identify any apparent inefficiencies

End market analysis

End use options

Main types of tea: black tea (A), green tea (B), oolong tea (C) and white tea (D)

Most common teas in global markets are green and black tea

Malawi produces predominantly medium grade black teas that are classified as crush-tear-curl (CTC)

One estate is producing green teas on a small scale for local/export markets



A



B



C



D

End market analysis

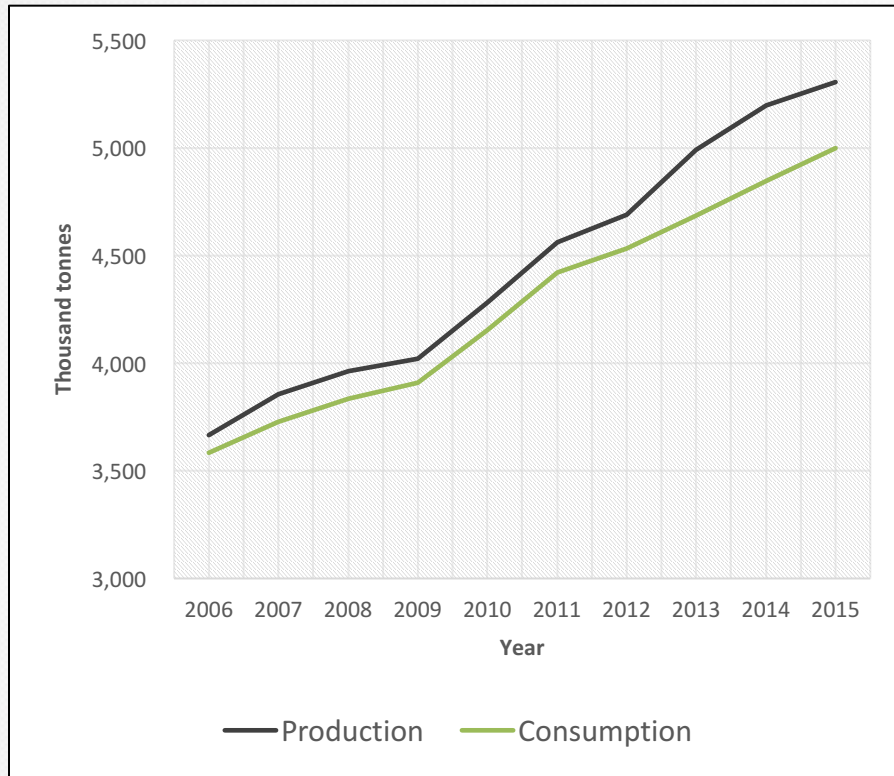


Figure 1: World Tea production and consumption, 2006-2015 (ITC, 2016)

Global tea production and consumption trends

World tea production has been steadily increasing and was recorded at just over 5.305 thousand tonnes in 2015

Consumption has not increased at the same rate

Production is dominated by four countries: China (43%), India, Sri Lanka and Kenya

These countries accounted for more than 75% of global production and 60% of global exports in 2016

End market analysis

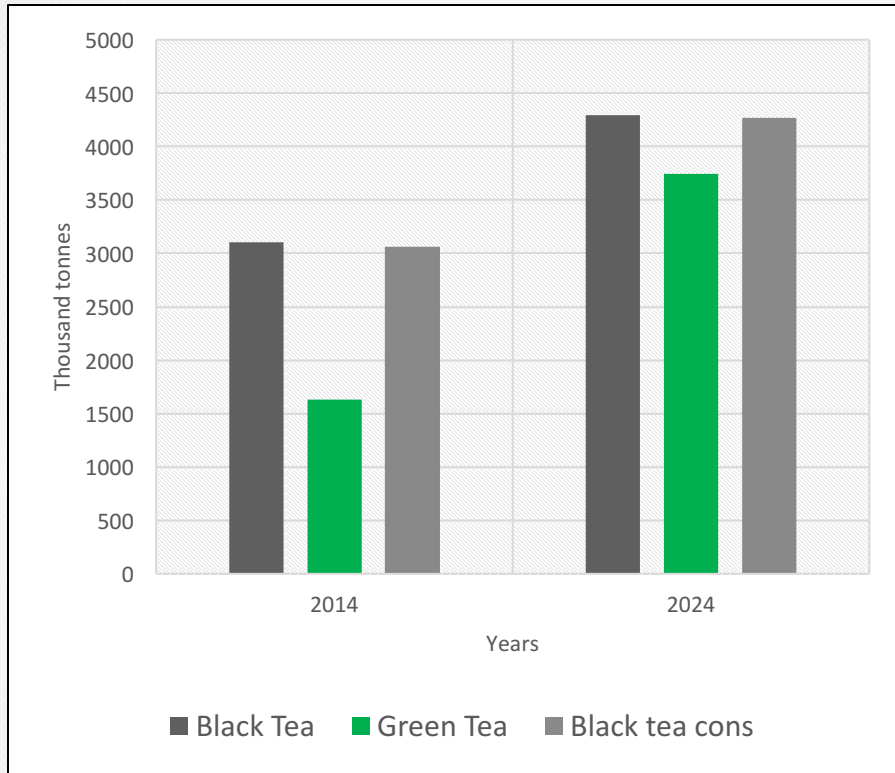


Figure 2: Projected production of black and green tea (2014 versus 2024) (FAO, 2016)

Production and consumption projections for black and green tea

Overall world black tea production is projected to increase by an annual growth rate of 3.7% to 4.29 million tonnes by 2024 due to significant increases in production in India, China, Kenya and Sri Lanka

World green tea output is expected to increase at a rate of 9.1 percent annually to reach 3.74 million tonnes in 2024

Consumption is expected to increase albeit at a slower rate – driven by increase in demand by China, Kenya and Malawi through increasing disposable incomes, increasing awareness of health benefits of tea

End market analysis

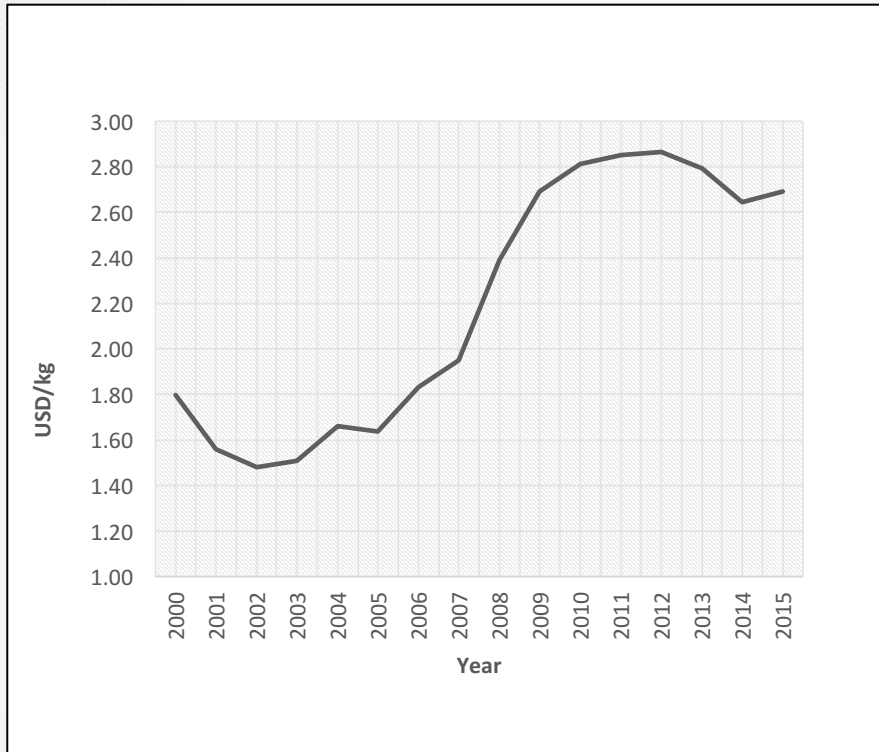


Figure 3: FAO Tea Composite Price (nominal), 2000 – 2015 (FAO, 2016)

Global tea price trends

The main drivers of international tea prices are market access and the changing dynamics among retailers, wholesalers and multinationals

Real prices are predicted, by the International Tea Committee, to decline by an average of 1% per annum from 2014 to 2024 which is expected to create a ‘cost-price squeeze’ for actors within the tea value chain, particularly at production level

End market analysis

Summary of global trends

Production and supply of black and green tea into the international market is projected to increase annually from 2014 to 2024

Supply is likely to exceed demand over this period, placing pressure on the real FAO Tea Composite Price unless demand for tea in both non-producing as well as producing countries can be increased

Per capita consumption in producing countries is typically lower than in non-producing countries and there is, therefore, an opportunity to increase the promotion, value-addition and diversification of teas to increase demand in tea producing countries

End market analysis

Local tea production trends

Ranked 16th in total tea output globally in 2016, Malawi ranks 4th amongst African countries producing more than 5,000 tonnes of black tea annually after Kenya, Uganda and Burundi

Malawi's share of total production has, over the period 2010 – 2016, declined from 7.8% in 2010 to 6.3% in 2016

Area harvested, total production and yield all show a declining trend from 2011 – 2016

Table 1: Tea production trends in Malawi, 2011 – 2016 (TAML, 2017 and FAOSTAT, 2018)

| | Year | | | | | |
|----------------------------|--------|--------|--------|--------|--------|--------|
| | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 |
| Area harvested (ha) | 18,629 | 16,583 | 17,872 | 17,241 | 17,813 | 17,867 |
| Production (tonnes) | 47,006 | 42,490 | 46,460 | 45,855 | 39,446 | 43,127 |
| Yield (tonnes/ha) | 2.52 | 2.56 | 2.60 | 2.66 | 2.21 | 2.41 |

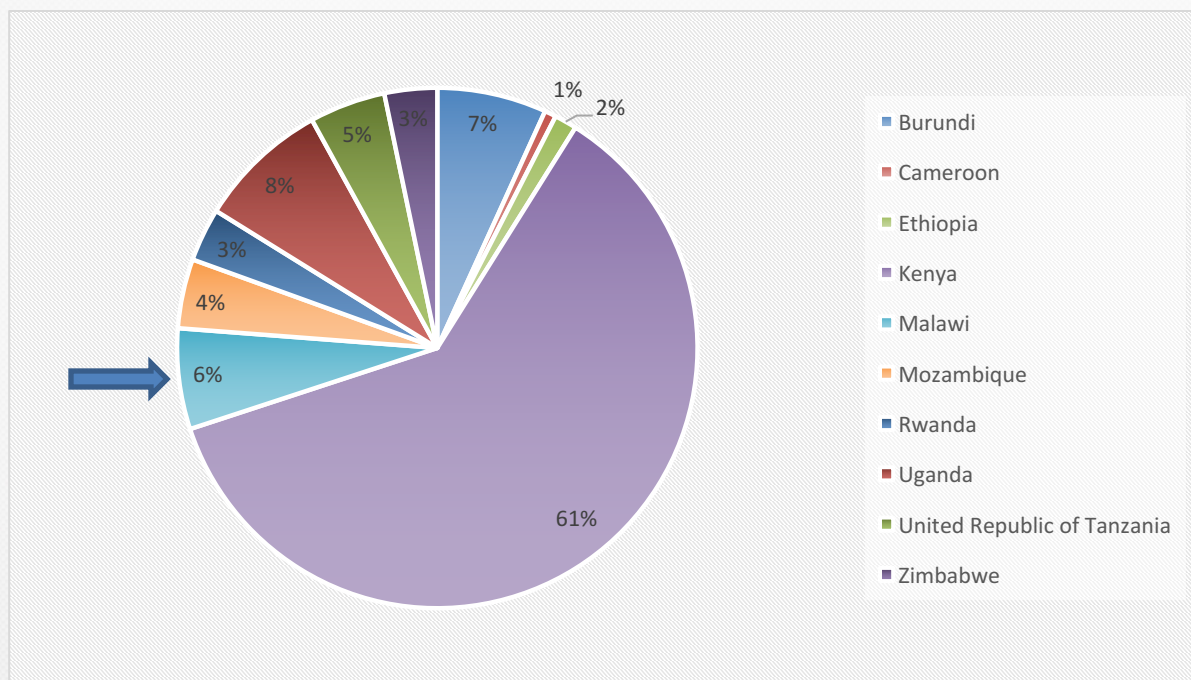


Figure 4: Total tea production for Africa Region (2016) (>5,000 tonnes) (FAOSTAT, 2018)

End market analysis



Local tea consumption trends

Tea in Malawi is typically consumed with breakfast, as a mid-morning snack and again in the afternoon

Actual domestic tea consumption in Malawi was annual average of 1,281 tonnes from 2002-2004 and 4,236 tonnes from 2012 – 2014

Domestic consumption is predicted to grow by just under 10% per annum from 2014 – 2024, ending at a final level of 10,873 tonnes in 2024

South Africa, the UK, the USA, Kenya and Holland have been major export destinations for Malawian teas over the period 2012 – 2016

Declining exports to USA/UK have been offset by increased exports to South Africa

End market analysis



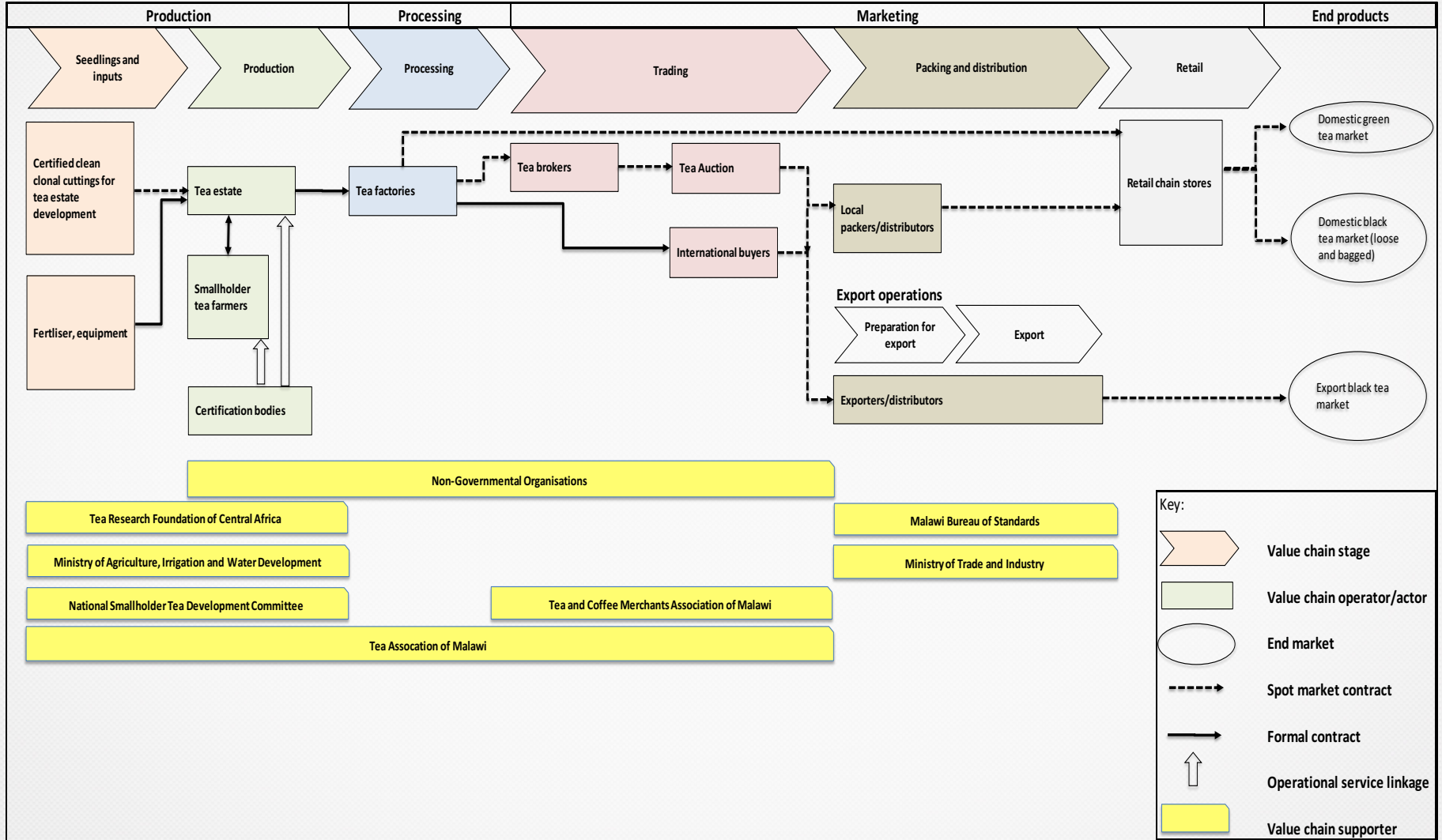
Figure 5: Nominal and real price trends for tea, Limbe Auction, 2001-2016 (2010 = 100) (TAML, 2017 and National Statistics Office of Malawi, 2018)

Local tea consumption trends

Real prices for teas sold through auction have shown a steep decline from 2008/2009. The decline in real tea prices over time could be due to one or more of the following reasons:

- An oligopsonistic (few large buyers, many small sellers) structure of the tea auction/buying market where producers have limited bargaining power with buyers
- Increased competition from other tea exporting countries that may have a comparative and/or a competitive advantage in unit cost or unit prices
- An increasing perception by international buyers that Malawian tea is of a lower quality than teas from Kenya or Uganda.

Value chain mapping



Value chain mapping

Production node overview

Tea is grown under rainfed conditions by commercial estates (9) and smallholder outgrowers ($\pm 17,000$) with approximately 92% of the green leaf tea harvested from December to May

Commercial estates are vertically integrated into the tea value chain and all estates have processing facilities where green leaf is delivered - act as a single channel market for smallholder growers who lack processing facilities

Smallholder grower associations have supply or offtake agreements/contracts to supply estates with growers themselves contracted to the respective association

Certification bodies such as Fairtrade, Rainforest Alliance, Ethical Tea Partnership (ETP) operate with the production node to ensure compliance, for estates and smallholder growers, with ethical certification standards;

Typical smallholder grower gross margin = **US\$ 124 per 0.3ha plot**

Typical commercial grower gross margin = **US\$ 892/ha**

Production areas



Production constraints

Commercial growers

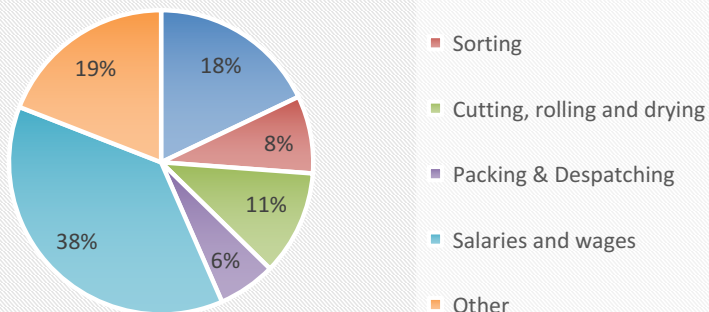
- Scarcity of suitable land and a growing population, particularly in the production hub in the Thoylo and Mulanje districts
- Effects of global climate change effects rainfall patterns, affecting tea production and quality
- An estimated 60% of Malawi's tea bushes in the commercial sector ($\pm 11,000$ ha) are older than 50 years and are due to be replaced
- High cost of lending from Malawian commercial banks, some estates seek capital and finance from foreign banks
- Unreliable electricity supply, poor infrastructure

Smallholder growers

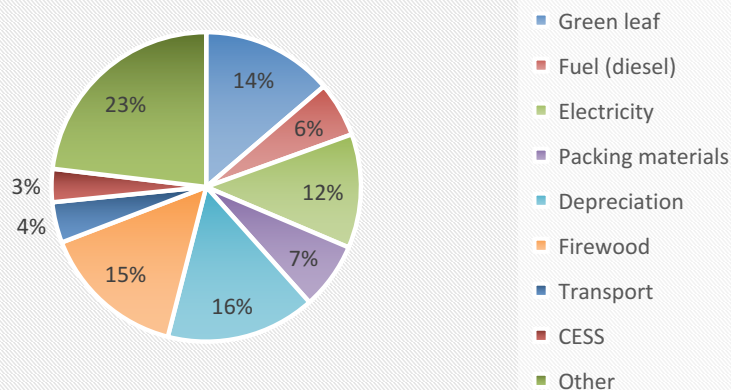
- Limited supply of seedlings from either estate, associations or the TRFCA nurseries
- Limited access to finance with several associations procuring production loans from commercial estates to fund inputs
- Lack of a centralised processing facility that is owned and operated for the benefit of smallholder growers. This limits the bargaining power smallholders have with suppliers and buyers and limits the marketing channels available

Value chain mapping

Labour



Materials



Processing node overview

All commercial tea estates have one or more tea processing facilities - Total processing costs are about US\$ 0.30 per kg made tea

The bulk of the processing costs for black tea are for materials (83%) with labour (casual and permanent workers) making up a smaller portion (17%)

Three fuel types are shown in the materials costs which is an indication of the lack of a reliable electricity supply via the national grid

Several estates visited also indicated that the volume of quality green leaf from smallholder growers to tea factories for processing fluctuates each year

Value chain mapping

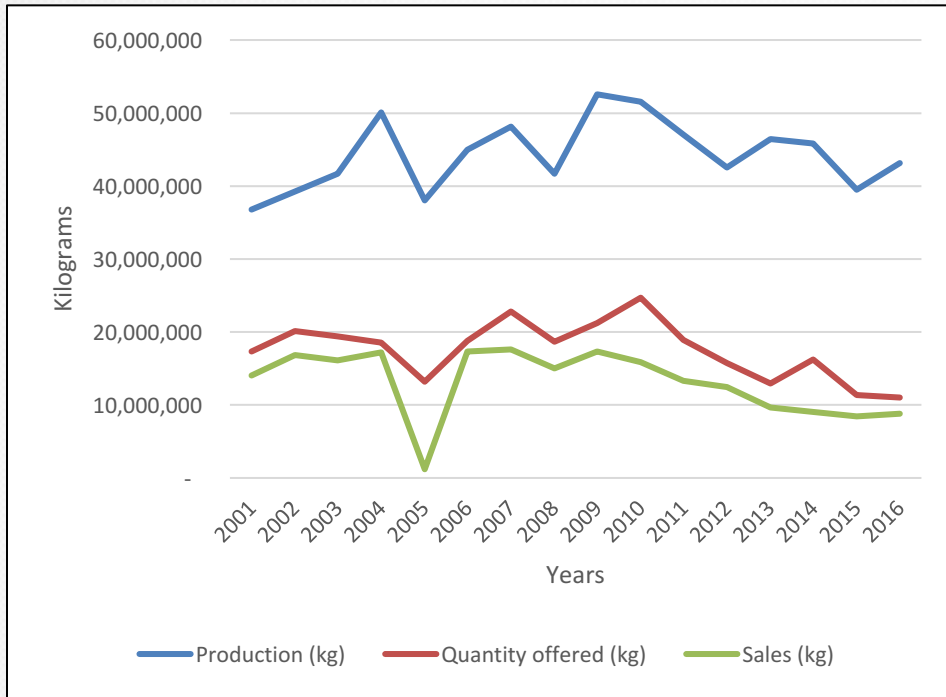


Figure 6: Quantity of tea offered and sold through the Limbe auction, 2001 – 2016 (TAML, 2017)

Marketing node overview

The marketing of tea in Malawi typically takes place via 3 channels:

- 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

Marketing node is dominated by a few multinational companies such as Unilever, Tata Tea, Van Rees and James Finlay

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

Value chain mapping

| | 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 | 54.86 | 0.08 |
| Harvest activities | 25.75 | 0.04 |
| 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 |
| Margin (per kg made tea) | 332.49 | 0.46 |
| | | |
| Local packer packing, distribution costs and margin | 3,727.25 | 5.14 |
| Wholesale price to retailer from packer (Loose tea) | 4,880.00 | 6.73 |
| Retail price (Loose tea) | 6,399.84 | 8.83 |
| Retail costs and margin (per kg made tea) | 1,519.84 | 2.10 |

Marketing margins for tea (produced and sold in Malawi)

Smallholder growers in Malawi make a significantly lower margin than all other actors within the value chain – only produce green leaf tea

The data provide some indication that further integration into the value chain by local producer-processors and smallholders, may yield higher returns

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

Value chain opportunities and threats

Opportunities

- Expansion of tea industry through focus on smallholder growers, driven by improvements in quality and yield
- Value addition opportunities due to concentration at processing level of value chain. Smallholder ownership of processing facilities to be investigated and feasibility established (PPP's?)
- Increasing replanting rate of existing estates through flexible, affordable and innovative financing
- Increased visibility of the industry through coordinated marketing campaigns could also provide access to new markets
- Numerous product diversification opportunities which could be pursued, e.g. green tea varieties

Threats

- Lack of R + D capacity and funding at the TRFCA; key skills shortages
- Production > consumption at a global level placing pressure on real prices and causing cost-price squeeze
- Buyers perception of Malawian tea as being of lower quality relative to competitors
- Land expropriation, particularly in the southern region remains a significant threat to the industry
- Finance gap exists due to lack of access to affordable finance – this will affect replanting rates
- Profitability of crops like macadamia encouraging enterprise substitution away from tea

Conclusions and recommendations

Investment focus areas

Focus on development of smallholders

The most likely way for the tea industry in Malawi to improve its competitiveness relies on the development of **smallholder grower level** of the value chain. If key 'bottlenecks' that constrain the sector can be unlocked, expansion of the industry can occur rapidly.

It is clear that investment is needed to assist the TRFCA in the following ways to increase seedling supply – public investment used to:

- Fund research and development activities targeting smallholder growers and their production needs
- Address the skills shortage at the TRFCA
- The TRFCA should be included in research grants availed to the GOM

Given the future role of smallholder growers in expanding the industry, the feasibility of an increased % split that favours the TRFCA should be investigated.

New ways for smallholder farmers to access financial resources need to be investigated, and tested – for example the formation and training of self-governing savings and credit groups

A stepped-approach towards sustainable livelihoods



Financial Education & Life Skills Training

Economic & financial literacy

Enhances awareness of climate/ other risks and opportunities

Improved capacity to take risks & devise strategies

Savings Groups

Savings as the “glue” stimulating social capital & action

Social Fund

Platform for effective and efficient support

Consumption smoothing

Strengthening women

Enterprise Development

Stimulates the formation of enterprises

Incubated in saving groups & enterprise focus groups

Fed by savings & business training

Improved capacity for self reliant action

Income smoothing

Building an inclusive ecosystem

Bridging savings groups/stokvels with formal financial services, enabled through group and individual bank accounts

Reducing ‘pain points’ through digital systems

Remote education and communication for members and groups

Bulk Buying & “Last Mile” sales (Zis’Ukhanyo) leveraging digitization & economic gains

Measuring impact

People choose to participate in structured process

Towards more sustainable & resilient livelihoods

Conclusions and recommendations

Investment focus areas

Creating an enabling environment

Immediate and urgent interventions to deal with electricity load-shedding are needed and clarity and certainty around the issue of land expropriation to increase investor confidence

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 CTC markets such as the UK and USA

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 – investment required substantial

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



Thank you!