

# Citrus in South Africa

Prospects for  
increased  
participation of small  
and medium-sized  
citrus producers

Project Brief, April  
2020



ES/S0001352/1

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## Project Overview

*Innovation and Inclusive Industrialisation in Agro-Processing is a two-year collaboration between researchers from the University of Edinburgh, the University of Johannesburg, and the Economic and Social Research Foundation, Tanzania.*

*The project is a comparative study conducted across Tanzania and South Africa focusing on three value chains: maize meal, citrus and dairy. The three aims of the study are:*

- *First, to describe the factors that determine innovation and inclusion in agro-processing*
- *Second, explain the challenges to promoting SME participation in agro-processing value chains*
- *Third, to use these findings to support industrial policy formulation at the national and regional level*

*In this project brief, we set out the key issues arising from our scoping work on citrus production in South Africa.*

## Summary

Citrus is a key fruit category in South Africa's fruit industry. Citrus accounts for 32% of total fruit production in South Africa (in volume terms) and it is also the main export fruit accounting for 45% of total fruit export earnings. Globally, South Africa is the second-largest exporter of citrus fruit after Spain accounting for 10% of global demand in 2018. The citrus fruit industry thus represents a mature and established industry.

South Africa's citrus fruit industry is export-oriented with over 100 years of exporting to developed countries. Citrus farming is profitable only when the majority of the fruit produced on the farm is sold on the overseas market, where the farmer can sell citrus for higher prices than on the local market. Because of the poor prices fetched in the local market, this poses several challenges for small and medium-sized firms to enter export markets and become sustainable. Therefore, majority of smallholder farmers sell their produce to the local fresh produce markets.

Participating in export markets requires that growers comply with the increasingly complex and stringent sanitary and phytosanitary standards in exports markets and ensure full traceability of their processes right down to the farming level. Such kinds of standards and requirements demand greater levels of compliance at each and every level of the value chain. Furthermore, the impacts of climate change on production impose challenges for producers to comply with standards. These challenges are acute for smaller producers who have limited investments to adopt technologies necessary to improve compliance and mitigate impacts of climate change. Nonetheless, of the registered industry growers, about 51 small and medium-sized growers have been exporting citrus fruit for more than 25 years contributing approximately 2% to South Africa's total citrus exports.

Although South Africa's citrus industry is export-oriented, there is still considerable citrus processing activities within the industry. Approximately 17% of total citrus fruit production goes into the manufacture of fruit juices; citrus fruit jams, jellies, marmalades, purees and pastes and preserved citrus fruit. Majority of the small and medium-sized citrus growers are selling their produce to fruit processing companies or venturing into small fruit-processing operations. It is important to note that, although the industry trends show noticeable growth in fruit processing post the year 2000, the growth is erratic. As such, the study aims to assess the opportunities that exist for small and medium-sized citrus-processing entrepreneurs including the constraints inherent to such business activities.

# Overview of the Value Chain

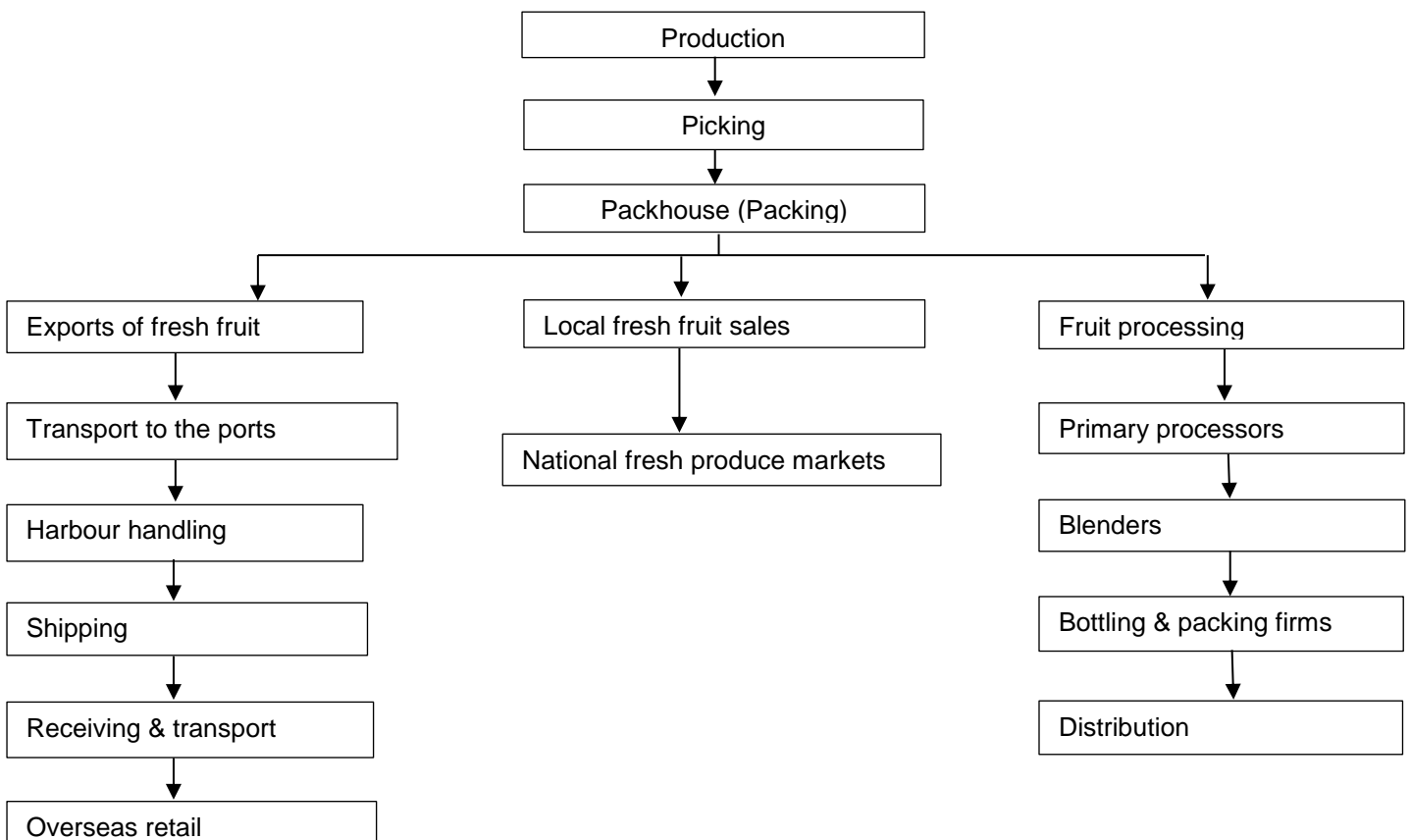
## Historical Context

South Africa's citrus industry dates back to 1654 when the first orange and lemon trees were planted by the Dutch East India Company in the Cape and first harvested in 1666. After two and a half centuries, South Africa exported its first citrus fruits to England, Britain in 1907. During this period, the Citrus Board played a prominent role controlling the distribution, marketing and prices of citrus in South Africa and overseas. The Citrus Board also limited the amount of citrus that was exported by introducing a quota (pro-rata) system especially during the years when citrus exports were so poor. The then industry association – the Citrus Exchange advertised and promoted fruit juicing in South Africa to increase the consumption of the much larger volumes of citrus that were being produced.

However, with the dawn of democracy in 1994 all control measures used for local marketing of citrus ceased. In 1997, all the fruit industries in South Africa were de-regulated and the industry formed a new industry body called the South African Citrus Growers Association (CGA) for one specific purpose – market access.

Given the legacy of apartheid, majority of the citrus commercial growers are white farmers with limited black participation. Hence, the CGA in 2003 appointed a transformation manager and formed a subsidiary body called the Citrus Growers Development Company to steer the citrus industry along the path of transformation and assisting emerging farmers and previously disadvantaged individuals to become successful citrus farmers. The industry currently supports 123 small and medium-sized black farmers. Although, the industry's efforts have brought about significant changes in the citrus industry, there is still a lot to be done in terms of creating a large pool of financially sustainable and globally competitive black growers.

Figure 1: Overview of the citrus value chain



## Upstream primary production, picking & packing

Production of citrus fruit is concentrated around 1200 commercial growers operating under the main industry body, the Citrus Growers Association. These farmers primarily produce for the export market. The large size of citrus production in South Africa can be attributed to the spread of plantations across seven out of the nine provinces in South Africa, taking up a total of 70 056 hectares across the country. Of this, the small and medium-sized farmers account for 7 320 hectares and make up 10% of the total growers (1200) in the citrus industry. The production, picking and packing stages of the value chain account for 24.5% of total production costs.<sup>1</sup>

**Processing:** The fruit value chain also comprises of ‘additional’ processing. ‘Additional’ processing activities include the manufacture of fruit juices; citrus fruit jams, jellies, marmalades, purees and pastes; preserved citrus fruit; and the production of related products like citrus oil.

As discussed above, fruit is primarily grown for the fresh (export) market. Fruit processing is a residual business that depends on ‘fall-out’ or downgraded fruit not suitable for the fresh market. In South Africa, for example; of the 2.3 million tons of citrus fruit produced in 2018, 71% was sold in the export fresh fruit market, about 17% went for processing while 6% was sold in the local fresh fruit market.

Fruit destined for additional processing proceed to some, or all, of the following steps (Chisoro-Dube, Paremoer, Jahari and Kilama, 2018):

- *Primary processors* convert the downgraded fruit into fruit pulp, concentrate and puree that is supplied to blenders or other ‘secondary’ processors who make jams, jellies or preserves
- *Blenders* mix various juice combinations and supply the mixed juice to bottlers
- *Bottlers* pack the final product into branded cartons and distribute to final consumers

Most processors are either partly or wholly owned by farmers who started the processing facility as a means to add value to downgraded fruit. The processing facilities are located close to production areas to reduce transportation cost (downgraded fresh fruit is bulky and costly to transport and does not travel well). Furthermore, proximity of processing facilities to production areas ensures that fruit is processed, packed and sealed quickly. Apple and pear puree, for example, must be packaged within 8 hours to avoid fermentation while orange and mango ferments even quicker (Chisoro-Dube at al., 2018).

Although the distance that fruit can travel varies per type, the maximum distance fruit can travel in an ambient supply chain is about 500 – 600km (downgraded fruit will not be transported in a more expensive cold chain). All processors interviewed were located within 150km of production areas (Chisoro-Dube at al., 2018).

Operationally, fruit processing is a difficult and precise activity as any errors in packing weight (‘under -pack’ or ‘over-pack’) cannot easily be corrected after the fruit is packed and must be controlled carefully during the production process. It is also a working capital-intensive business as the product must be processed at harvest time and stored at the processors’ cost for delivery to retailers throughout the year (Chisoro-Dube at al., 2018).

The equipment used in processing is generally tailored to a particular category of fruit (depending on the size of the pip, for example). However, there are options to establish multi-fruit processing plants to improve utilisation but this is not common (Chisoro-Dube at al., 2018).

Within the fruit processing segment, there is also a ‘hierarchy’ in terms of which form of processed fruit is more

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<sup>1</sup> <file:///C:/Users/shingiec/OneDrive%20-%20University%20of%20Johannesburg/GCRF/Citrus/CA-Citrus-Academy-CSP-Citrus-Secondary-Programme-M02-Citrus-production.pdf>

'forgiving' than others. The puree market, for example, is easier to enter because purees can absorb poorer quality fruit than canning where the fruit must still be visually appealing to the consumer. The extent of processing also differs by fruit type. For orange, mango, and litchi, the pulp is normally kept in the fruit puree but apple and pear juice is clarified to remove the solid particles. To maximise the cost of transport, processors try to transport the fruit pulp, puree or juice with as high a sugar content (or 'Brix value') as possible (Chisoro-Dube at al., 2018).

Generally, there is a significant amount of vertical coordination in the value chain to ensure optimal utilisation of processing plants and to ensure that conversion happens rapidly given the short shelf life of fruit. Hence, firms at the processing level are either wholly or partly owned by farmers and generally operate at the blending level of the value chain. However, processors and blenders tend not to operate at the consumer goods level, leaving the bottling and branding of ready-to-drink juices to large FMCG firms.

The South African fruit processing industry is relatively mature with slow growth. From the supply side, growth of the fruit juice industry is largely due to growth in fruit production while on the demand side growth in processed fruit products has been driven by improvements in per capita income and innovation in the industry. However, in terms of overall industry growth, there has been no entry of new processors but rather a trend towards consolidation with large processors taking over smaller processors. Interviewees attribute the rising consolidation to economies of scale and the globally competitive nature of the sector (Chisoro-Dube at al., 2018).

Table 1 shows the major primary processors and juice manufacturers in the citrus industry. Fruit processing is relatively concentrated with the largest five firms accounting for slightly under 50% of total revenue in the industry (Euromonitor, 2017). There has been no entry of new processors but rather a trend towards consolidation with large processors taking over small processors, which is characteristic of a mature and stable industry with slow growth (Chisoro-Dube at al., 2018).

*Table 1: Citrus processing companies*

<b>Primary processors/key producers of citrus concentrate</b>	<b>Juice manufacturers/packaging companies</b>
Granor Passi	Nestle
Uni-Fruit	Coca-Cola (Appletiser)
Venco Fruit Processors	Passina
Cape Fruit Processors	Langeberg & Ashton Foods (subsidiary of Tiger Brands)
Bronpro	Clover
Elvin	Rhodes Food Group
Letaba Citrus Processors	Parmalat
Magaliesberg Citrus	Sir Juice
Onderberg Verwerkingskoöperasie	Take 5
Orange River Concentrate Producers	Pioneer Foods (Liqui fruit)
Southern Canned Products	
Soga Organic	

*Source: Compilation by author*

Key producers of citrus concentrate include Granor Passi, Uni-Fruit, Venco Fruit Processors and Cape Fruit. Granor Passi is one of the largest citrus fruit processors with a production capacity of 300 000 tonnes of fresh fruit per annum. Smaller processors such as Venco Fruit Processors have a production capacity of 80 000 to 100 000 tonnes of fruit per year (Chisoro-Dube at al., 2018)

Major players in the fruit caning business include Langeberg & Ashton Foods, a subsidiary of Tiger Brands, and Rhodes Food Group. Langeberg & Ashton Foods accounts for approximately 60-70% of the canned fruit puree market. The company's 'Koo' brand is the leading brand in processed fruit and vegetables with a 33% value share in 2016.<sup>2</sup> Rhodes Food Group accounts for the remaining 30-40% share of the market. Its leading brands, Rhodes and Bull Brands, had an 8% value share in 2016 (Chisoro-Dube at al., 2018).

At the downstream juice manufacturing and distribution level, the market-leading firms include Nestle, Coca-Cola, Passina, Tiger Brands, Ceres (Pioneer) and Clover. Smaller recent entrants include Sir Juice in Johannesburg and Henties Juice Factory in the Western Cape (Chisoro-Dube at al., 2018).

## Challenges for small and medium-sized citrus growers

Because of the export-oriented nature of the citrus industry, one of the key challenges faced by small and medium-sized citrus growers is the limited access to national, regional and international markets. Furthermore, the poor prices fetched in the local markets coupled with limited access to technical and business management knowledge and services make it difficult for small and medium-sized growers to develop successful and financially viable enterprises.

Although the citrus processing business is more 'forgiving' than the fresh fruit, it is capital intensive, heightening the barriers to entry for small and medium-sized processors. Fruit processing is also a relatively concentrated industry dominated by large corporates.

## References

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<sup>2</sup> Euromonitor, 2016.



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