

**Briefing Document  
The Mozambican  
Fruit Industry**

**TechnoServe**

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**Mozambique, Maputo  
Tel: 258 1 416032  
Fax: 258 1 416049**

## **IMPORTANT RESOURCES**

### **Production Resources**

Amongst the countries of Southern Africa, Mozambique has the strongest production potential. The soils are generally fertile having higher humus contents than those of most of the continent. They have the ideal combination of being both free draining and able to retain moisture. There are some 36 million hectares suitable for crop production, of which only 10% is utilised and 90% of which is in the small holder sector. Mozambique has 3,300,000 hectares of land that can be irrigated, of which only 14% is actually being properly exploited. This is twice the area of irrigable land in South Africa

### **Climate**

Mozambique's climate is described as mild tropical, avoiding both extremes of heat and cold. The temperature never falls below 7°C. Typical rainfall figures are twice those of South Africa. There are also more sunshine hours than in most of South Africa. There are an abundance of micro-climates. The range of climates supports top quality bananas, most citrus cultivars (including easy peelers), avocados, mangoes, litchis, pineapples, papaya, passion fruit, strawberry and guava.

### **Quality of Crop Production**

Mozambique grows top quality bananas and before the civil war in the 1970s exported large volumes to both South Africa and Europe.

The quality of grapefruit has always been exceptional and used to be exported under a well-regarded Mozambican label. The lemons are highly regarded internationally. Valencia oranges are grown to international standards. Navel oranges can only be grown well in a specific micro-climates. Surprisingly, easy peeling citrus is grown by small farmers in three locations.

Excellent quality limes can be grown in Mozambique.

### **Seasonality**

Mozambique, being in the Southern Hemisphere is six months out of phase with production in the Northern Hemisphere. The table below summarises the seasons of the major fruit crops.

Table 1 – Crop Seasonality

Crops	J	F	M	A	M	J	J	A	S	O	N	D
Grapefruit			▲▲■▲▲									
Navels Oranges			▲■▲▲									
MidSeason Oranges				▲■▲▲▲								
Valencia Oranges						▲▲■▲▲▲▲						
Easy Peelers				▲■▲▲▲▲								
Lemons			▲■▲▲▲▲									
Mangoes	■▲▲▲									▲▲■▲▲		
Lichi											▲■▲▲▲	
Banana	■	■	■	■	■	■	■	■	■	■	■	■
Papaya	■	■	■	■	■	■	■	■	■	■	■	■
Strawberries											▲■▲▲	
Guava						▲■▲▲▲						
Avocados			▲▲▲	■	■	■	■	■	■	▲▲▲		

Notes: Peak Season ■■■■■■ Low Season ▲▲▲▲▲

Production tends to be earlier than South Africa for crops like mangoes, litchi and in the case of bananas continues steadily throughout the year.

**Costs**

Labour rates currently are about 60% of those in Zimbabwe and only 1/5 of those in South Africa. Even more important are that high soil fertility levels and the generally low incidence of pests and disease reduces production costs. All the major ports are within 200 to 300 kilometres of the major production zones.

**Transport and Distribution**

The road network in Mozambique is relatively undeveloped and is most developed in the South, reasonably developed in the centre and poorly developed in the North.

Most international flights are made using the regional hub at Johannesburg, but daily flights are made into Lisbon.

There are three major ports, Maputo, Beira and Nacala.

Maputo port is fully operational with equipment and cold storage. The cold storage capacity amounts to 2600 pallets (but easily expandable to 3700 pallets) at Matola Cargo terminal and 2300 (expandable to 3400 pallets) at Maputo Port Terminal, to give a total capacity of 5000 pallets, but easily expandable to 7000 pallets. In the peak season which last 18 weeks from April, some 2 ½ ships a week will be loaded with citrus in Maputo harbour for onward distribution into Western and Eastern Europe, the Middle East and the Far East. For the South African industry the expansion of Maputo Port will take the pressure off the other Exports Ports, and especially Durban – which has a 260,000 pallets capacity but was responsible for some 400,000 pallets in 1999.

Maputo is also serviced by refrigerated container shipping services, and particularly Maersk.

Up until now product has been exported by refrigerated container out of Beira Port. The Citrus Terminus at Beira has been purchased by a 50:50 joint venture between Watertight Investment (a group of Zimbabwean citrus growers) and CFM (the Mozambican train and port authority). More Recently Oceanic has taken a 1/3 holding in the Cold Stores.

Currently shipping times from Maputo and Beira to Abu Dhabi (Jebel Ali) is about 11 - 13 days, with transshipments via Salalah . Shipping to NAVA Sheva (some 40 Km from Mumbai) takes 17 days from Maputo and 15 days from Beira. Maersk forward the container from the port by train into Mumbai for a further \$190 per container. The table below summaries the shipping times from Beira and Maputo into Asian markets.

The service out of Mozambique via Salalah is fortnightly. Sailings from Mozambique to South Africa are weekly.

Table 2 – Indicative Freight Rates and Transit Times

Routing	Standard Rates - 20'/40'	Transit Time
<b>Beira - Salalah - Nava Sheva</b>	<b>US\$ 4900/6800</b>	15 days
<b>Beira - Salalah - Jebel Ali Dubai</b>	US\$ 3600/6300	11 days
<b>Maputo – Salalah - Nava Sheva</b>	US\$ 4900/6800	17 days
<b>Maputo – Salalah - Jebel Ali Dubai</b>	US\$ 3600/6300	11 days
<b>Beira - Salalah – Singapore</b>	US\$ 3600/5700	25 days
<b>Maputo - Salalah – Singapore</b>	US\$ 3600/5700	27 days
<b>Beira - Salalah – Jeddah</b>	US\$ 3600/6300	15 days
<b>Maputo - Salalah – Jeddah</b>	US\$ 3600/6300	17 days
<b>Beira – Salalah – Hong Kong</b>	US\$ 3600/5700	25 days
<b>Maputo - Salalah - Hong Kong</b>	US\$ 3600/5700	27 days
<b>Maputo - Beira – Cape Town</b>	Not available	2-3 weeks
<b>Maputo - Beira – Durban</b>	Not available	1-2 weeks

With Mozambique the following charges apply: US\$ 85 / 20' and US\$ 155 / 40' for port charges plus \$20 per container for administration and communication charges.

The above rates are subject to THC and local charges at origin and destination plus a bunker adjustment fee, currently US\$ 50/20' to Far East and US\$ 80/20' to Middle East.

The smaller chartered reefer vessels would be within the range of 100,000 to 200,000 cubic feet and capable of carrying 1100 to 1800 pallets respectively. Shipping times to Mumbai from Mozambique ports are 9-10 days. Assuming a 1500 cubic feet vessel with 1500 pallets and a cycling time of 24 days and chartering rates of \$4000 per day, pallet rates would be approximately \$80 - \$90 each.

#### **Inspection Services**

Inspection of exports is carried out by the South African Perishable Products Exports Control Board (PPECB) at Maputo, while at Beira a trained Government Inspector is employed.

## Crops

### Citrus

Mozambique was initially encouraged into growing grapefruit both because of the climate and the relative ease of growing the crop. Subsequently Valencia oranges were added to the crop mix. Production was focused on the Estate sector and exports via the South African Citrus Exchange and subsequently Outspan. By the mid 1960s' Mozambique was exporting nearly 10,000 tonnes of citrus divided equally between grapefruit and oranges. By 1971 the volume had reached 18,500 tonnes of which 11,000 tonnes (61%) was grapefruit, and 7,000 tonnes were oranges and mainly Valencia types.

Grapefruit grown in Mozambique is especially noted for its thin skins and excellent flavour in the Marsh Seedless and Start Ruby. In the 1960-70s there was a seven star grading system to reflect the various qualities of grapefruit – and Mozambique would achieve 7 stars in the low altitude areas, near the sea with sandy semi-loamy soils with minimum inputs.

The smaller farmer sector was encouraged to take up the production of Easy Peeling types, Ellendales in particular, but also smaller quantities of Mandarins, for marketing in the local market.

Mozambique grows high quality lemons and can grow extremely high quality green limes (South African producers are unable to grow international standard limes due their cooler growing conditions).

### Estate Production

At its peak in the early 1970s Mozambique had some 15 – 20 Estates growing citrus for export as fresh fruit. The majority of these estates were in Maputo province in Umbeluzi and Manhica.

### Small Holder Production

Easy peeling citrus was introduced by the Portuguese and the local traders (lojas) encouraged the small farmer sector into production. The main variety is believed to be Ellendales – which comprise about 2/3 of production, the remainder being the more brightly coloured and smaller Nova. The estimated level of production by areas is set out in the below

Location	Production
Chimoio	3000
Inhambane	4500
Espungabera	1000
<b>Total Tonnes</b>	<b>8500</b>

The harvesting season is from April through to July.

### **Bananas**

There are two main areas of Banana production, the areas around Chimoio in Manica District and four districts close to Maputo.

<b>Production Location</b>	<b>Production in Tonnes</b>
Manica District, Chimoio area	35,000
Maputo District, Inkumati Valley	35,000
Maputo District, Boanae area	6,000
Maputo District, Marracuene area	6,000
Maputo District, Umbeluzi area	6,000
<b>Total</b>	<b>88,000 tonnes</b>

The major variety grown is Dwarf Cavendish especially in Maputo District, but Williams Hybrids and various diploid varieties, some of which produce the short, fingered fruit noted for its flavour and sweetness and often called 'Fig' or 'Apple' bananas. The non-intensive nature of production has kept production relatively disease free. Very little spraying is required.

Most production is still at a basic level with almost no fertiliser required. Yields are well below what is achieved by commercial production standing at around 10 kg per bunch as opposed to 25 to 30 kg commonly achieved under modern production practices. Post harvest handling methods are rudimentary. However the eating qualities are excellent and with a few very basic improvements in production techniques and post harvest practices, Mozambique has the potential to be able to produce grade one bananas at low cost.

### **Estate Production**

No estate production, although there was in the past when Mozambique was an exporter of bananas. Up until the late 1970s Mozambique was the major supplier of bananas into the South African market. At that time Mozambique exported between 20,000 and 25,000 tonnes of bananas annually, of which the majority was exported to South Africa.

### **Smallholder Production**

Currently, the vast majority of production is in the small farmer sector of which there are probably some 25,000 players. With improved post harvest handling, top quality bananas have been shown to be delivered by a marketing company based in Chimoio.

### **Other Crops**

Avocados, pineapple, strawberry (in very specific locations) and passion fruit grow well in the Mozambique.

**Mangoes**

Mangoes grow throughout Mozambique but with slightly superior growing conditions in the Central and Northern areas of Mozambique. The production conditions are acknowledged to be superior to South Africa and informed opinion in South Africa is that Mozambican mangoes are of a superior quality. Production is typically some three weeks ahead of similar cultivars in South Africa. Field trials have been carried out with Indian varieties such as Alphonso.

**Litchis**

Litchis are grown in Chimoio and throughout Mozambique. Some production occurs on estates and scattered trees are found amongst the small farmer sector. Harvesting is some three weeks earlier than in South Africa. The varieties grown are the Madagascan types.