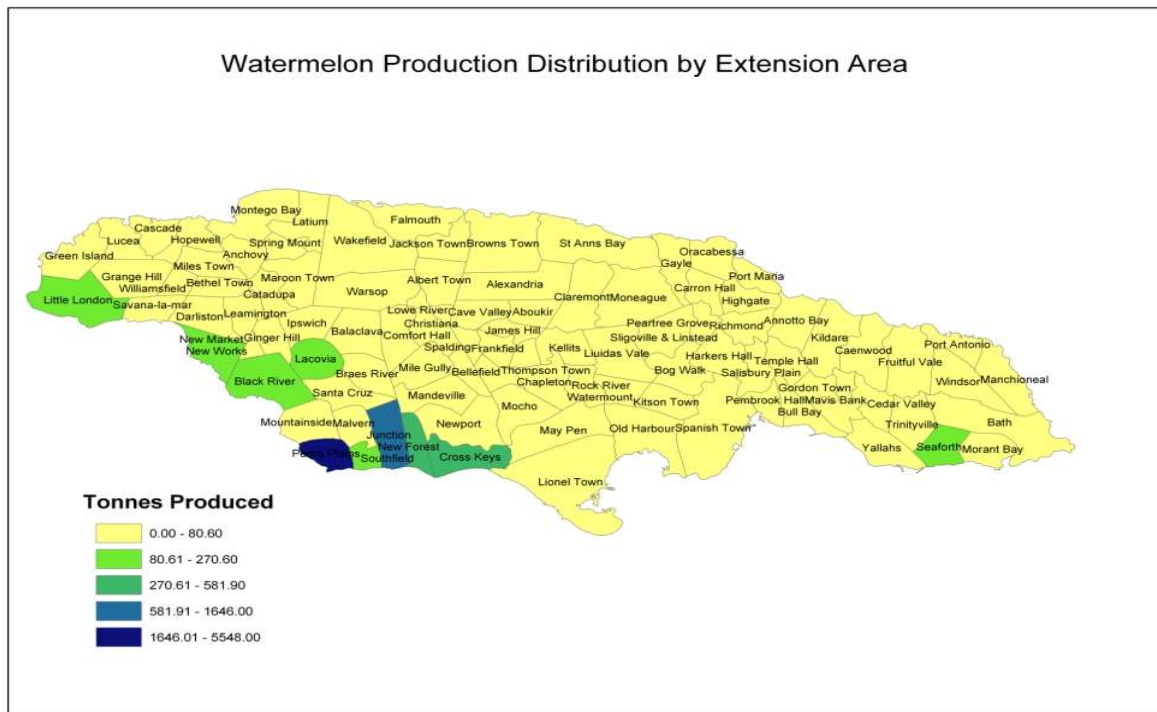


## Investment Profile – Watermelon

## Overview

Watermelon (*Citrullus lanatus*) is from the plant family cucurbitaceae. It is grown in tropical climates and the fruit's flesh is usually deep red to pink with black seeds in the centre. Seedless varieties of watermelon have been cultivated as well as fruits with yellow flesh instead of the typical, red/pink.

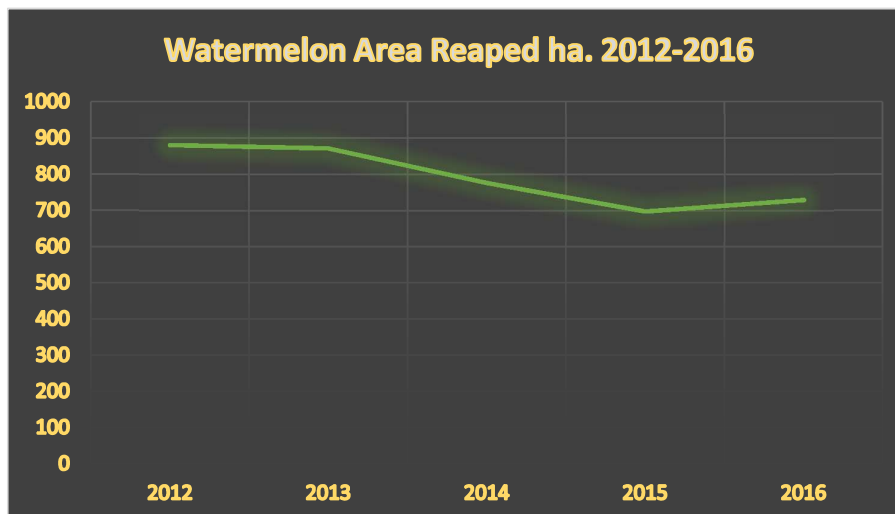
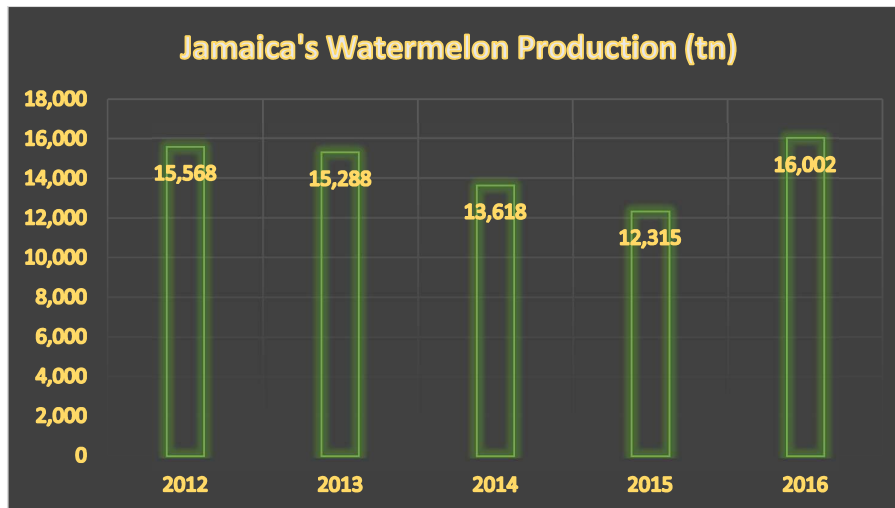
Watermelon is cultivated island wide; however most of Jamaica's production comes from St. Elizabeth and Manchester. The fruit is available all year round.



Source: RADA

## Watermelon Production in Jamaica

Watermelon production in Jamaica is used to satisfy the domestic market with the shortfall between demand and local production filled by imports. In 2016 Jamaica's watermelon production stood at 16,002 tonnes from a total area reaped of 730 hectares- an increase of just under 25% in yield over 2015 where yields of 17.64 t/ha were realized.



Year	Production (tn)	Area Reaped (ha.)	Yield (t/ha)
2012	15,568	880	17.6918182
2013	15,288	871	17.5522388
2014	13,618	776	17.5484536
2015	12,315	698	17.6428367
2016	16,002	730	21.9205479

## Crop Care

The recommended planting density for watermelon is 4,356 plants per hectare (6' x 4' planting distance). The soil type preferred is well aerated, free draining loams. Soil fertility management/fertilization should be based on the results of a comprehensive soil analysis.

The crop is mostly affected by the following pests and diseases:

- Powdery mildew
- Downy mildew
- Aphids
- Thrips
- Whiteflies

The use of a ferti-irrigation drip system is most efficient in delivering the optimum quantities of water and nutrients at the ideal frequency. The use of an Integrated Pest Management System (IPM) is also encouraged. The sowing date for watermelon is from September – April, and growth time is 4-5 months.

## Cost of Production

The approximate cost to produce one hectare of watermelon is \$1,128,000.00.

Item	Marketable Yield Per Ha.		JMD COP (per ha)	JMD COP (per kg)
	Tonnes	Kg		
Watermelon	21	21000	\$ 1, 128,000.00	\$ 53.71

At farm gate, watermelon fetches prices of between \$80- \$148 per kg. Under favourable conditions, investors can expect a ROI of at least 49%.



Source: Ministry of Agriculture, Jamaica

## **Watermelon Imports**

Watermelon is imported in its fresh form to the Jamaican market with the main suppliers being the United States and Guatemala however imports also originate from Honduras, Chile and Mexico. For the period 2012-2016 Jamaica imported 4,226 kilograms of watermelon at a cost of JMD 993,260.44.

<b>Year</b>	<b>Value Imported (JMD)</b>	<b>Qty Imported (Kg)</b>	<b>Unit Price</b>
<b>2012</b>	<b>\$368,613.03</b>	<b>2210</b>	<b>\$166.79</b>
<b>2013</b>	<b>\$118,599.93</b>	<b>278</b>	<b>\$426.62</b>
<b>2014</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>2015</b>	<b>\$395,433.82</b>	<b>893</b>	<b>\$442.82</b>
<b>2016</b>	<b>\$110,613.66</b>	<b>845</b>	<b>\$130.90</b>

## **Opportunities**

Global production of watermelon in 2016 was 196 million tonnes –a 107 tonne increase over production in 2015 which totalled just over 89 million tonnes. This increase in production was in an effort to satisfy growing global demand in the United States, Europe and Canada. According to the USDA most watermelons imported to the United States come from Mexico, Guatemala and Honduras.

China currently leads global production however most is used to satisfy domestic demand and not for exports. Mexico and Spain dominate the worlds export market in watermelons accounting for 26% and 25% of total global exports respectively. The value of global watermelon exports appreciated by 7.9% from 2015 to 2016.

In 2016 the United States watermelon imports were valued at \$376,252,000.00, Germany \$209,973, 000.00 and Canada rounded out the top three importers with \$113,307,000.00. With the yearly worldwide consumption in watermelon trending upwards it presents an opportunity for investors in watermelon production to capitalize on established and emerging markets for export. Jamaican watermelon is one of fifty two (52) items that have preclearance into the United States giving investors ease of access to that market.

The Jamaican hotel and tourism industry also continues to be a lucrative market for investors in watermelon production as there is a consistent year round demand for fresh

fruit. With tourism arrivals reaching record highs, the demand for fresh fruit is growing yearly as hotels look to include fresh local options to their menus.

Within CARICOM, the major exporters are Trinidad, Guyana and Dominica. Almost all of exports originating from Trinidad and Guyana are to Barbados while Dominica exports to Antigua. Bahamas, St. Lucia and Antigua all import fresh watermelons from the United States.

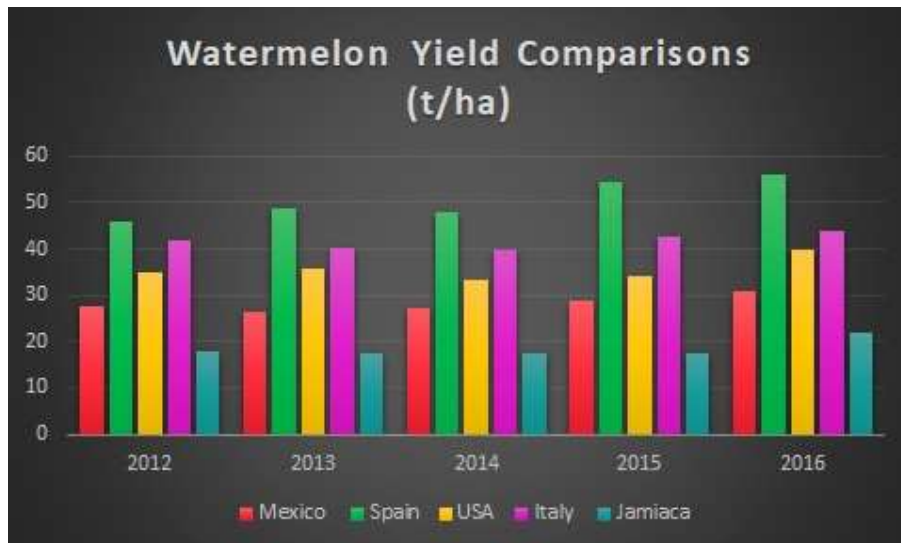
#### **Top Importers of Watermelon within CARICOM**

<b>Country</b>	<b>Value imported in 2016 (USD thousand)</b>	<b>Quantity imported in 2016 (Tonnes)</b>	<b>Unit value (USD/unit)</b>
Bahamas	1404	275	5105
Barbados	475	475	1000
Antigua and Barbuda	265	125	2120
Saint Lucia	120	96	1250
Suriname	30	83	361
Saint Vincent and the Grenadines	29	15	1933

source: [www.trademap.org](http://www.trademap.org)

## Global Production

Global watermelon production in 2016 was 196,266,834 tonnes with Asia accounting for over 65% of total production. Worldwide, Spain holds the top spot for highest yield per hectare at 55 (t/ha) in 2016 well ahead of the world average of 25-30 (t/ha). Mexico- the country with the largest exports of the commodity sitting at 380.9 million in 2016; recorded yields of 31 (t/ha) for the same year. Jamaica recorded yields of 21 (t/ha) in 2016. ([www.fao.com](http://www.fao.com)).



Yield Comparisons between Jamaica and top exporters. (source: [www.fao.org](http://www.fao.org))