Irish Potato Profile



For the period 2013-2017

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Agronomic Requirements

Climate, soils and site selection are important considerations in choosing areas for Irish potato production.

Climate

The single most important consideration for Irish potato production is climate. It is a coolseason crop, growing best at temperatures $16\text{-}27^{\circ}\text{C}$, with its best yields obtained when an average temperature of 20°C is maintained during the growing period. It is important to note that, although day temperatures may be greater than 27°C , Irish potato cultivation is still possible if night temperatures remain at least 10°C lower than day temperatures. Hence the right climate will be dependent on a suitable location and appropriate time for growing Irish potato.

Soils

Irish potato can be cultivated in a wide range of soil types, provided the soil is sufficiently retentive of moisture and friable enough for good root and tuber development. Soils with pH between 5 and 7 and high in organic matter are best suited.

Waterlogged soils should be avoided.

Site selection

In selecting land for Irish potato production, fields that are under trees, and shadows cast by trees, must be avoided. Choose areas that are flat or gently sloping and shun areas that are prone to flooding and waterlogging. Irish potatoes must not be grown in areas where tomatoes, peppers, tobacco, Irish potato and other members of the Solanaceae family have been grown in the last three years. If this cannot be easily achieved, rotation with non-solanaceous crops must be rigorously practiced.

Why invest in Irish Potato?

- Contributes to National Food Security
- Reduce Imports (Conserves Foreign Exchange)
- Income Earner
- Represents a welcome addition to a wide variety of uses in the diet of the population

Estimates of Irish Potato Production (Kg) (2013-2017)

Table 1

| | | | Quantity(Kg) | | |
|---------|------------|------------|--------------|------------|------------|
| Quarter | 2013 | 2014 | 2015 | 2016 | 2017 |
| 1st | 3,946,000 | 6,172,600 | 8,263,600 | 8,597,000 | 5,596,000 |
| 2nd | 8,347,100 | 10,130,500 | 7,380,100 | 6,306,000 | 9,288,000 |
| 3rd | 3,851,400 | 1,324,600 | 1,262,500 | 1,036,000 | 1,330,000 |
| 4th | 1,276,100 | 1,949,100 | 1,308,300 | 1,068,000 | 934,000 |
| Total | 17,420,600 | 19,576,800 | 18,214,500 | 17,007,000 | 17,148,000 |

Source: MICAF, Agricultural Marketing Information Division (AMID)

During the period 2013-2017, a total of 89,366,900 kilograms of Irish potato was produced in Jamaica, with the bulk of the production occurring in the first and second quarters of each year. The year 2014 recorded the highest production quantity which was 19,576,800kg.

Estimates of yield per hectare (2013-2017)

Table 2

| Year | Production (Kg) | Area Reaped (Hectares) | Yield per Hectare (Kg) |
|------|--------------------|---------------------------|---------------------------|
| 2013 | 17,420,600 | 1,050 | 16,591.05 |
| 2014 | 19,576,800 | 1,155 | 16,949.61 |
| 2015 | 18,214,500 | 1,107 | 16,453.93 |
| 2016 | 17,007,000 | 1,017 | 16,722.71 |
| 2017 | 17,148,000 | 1,039 | 16,504.33 |

Source: MICAF, Agricultural Marketing Information Division (AMID)

The average yield rate per hectare for the period 2013-2017 was 16,644 kg. The year 2014 recorded the highest yield per hectare; 16,950 kg with a production of 19,576,800 kg and the area reaped was 1,155 hectares. The year 2016 had the smallest area reaped; 1,017 hectares producing 17,007,000 kg of potatoes and 16,723 kg yield per hectare.

Irish Potato Import (kg) (2013-2017)

Table 3 Potato other than seed potato

| Country | Quantity(Kg) | | | | |
|-----------------------------|--------------|-----------|-----------|-----------|-----------|
| | 2013 | 2014 | 2015 | 2016 | 2017* |
| Canada | 720,827 | 133,186 | 906,349 | 626,825 | 172,467 |
| Netherlands | 1,435,179 | 2,109,795 | 2,447,163 | 1,728,178 | 1,861,980 |
| Netherlands Antilles | 29,268 | - | - | - | - |
| United States of America | 155,557 | - | 512 | 27,776 | 221 |
| Total | 2,340,831 | 2,242,981 | 3,354,024 | 2,382,779 | 2,034,668 |

Source: STATIN

*: Preliminary

Table 3 shows Irish potato imports during the period 2013-2017. From the data, it is evident that the Netherlands is the largest exporter of the commodity to Jamaica, accounting for 91.51% of total imports for 2017.

Irish Potato Export (kg) (2013-2017)

Table 4 Potato other than seed potato

| | | m . l | | | | |
|-----------------------------|------|-------|------|------|-------|-------|
| Country | 2013 | 2014 | 2015 | 2016 | 2017* | Total |
| Canada | 30 | - | - | 89 | 1,456 | 1575 |
| Cayman Islands | - | - | - | - | 8 | 8 |
| St. Maarten (Dutch part) | - | - | - | - | 1 | 1 |
| United Kingdom | - | - | - | - | 109 | 109 |
| Total | 30 | - | - | 89 | 1,574 | 1693 |

Source: STATIN

*: Preliminary

During the period 2013-2017 Jamaica only exported a total of 1,693kg of Irish potato; this is due to the fact that most of the production was consumed locally.

National Irish Potato Consumption (Kg), 2013-2017

Table 5

| Year | Production (Kg) | Import (Kg) | Export (kg) | Local Consumption (Kg) | Production % of Local Consumption |
|---------|--------------------|-------------|-------------|------------------------------|---|
| 2013 | 17,420,600 | 2,340,831 | 30 | 19,761,401 | 88 |
| 2014 | 19,576,800 | 2,242,981 | - | 21,819,781 | 90 |
| 2015 | 18,214,500 | 3,354,024 | - | 21,568,524 | 84 |
| 2016 | 17,007,000 | 2,382,779 | 89 | 19,389,690 | 88 |
| 2017 | 17,148,000 | 2,034,668 | 1574 | 19,181,094 | 89 |
| Average | 17,873,380 | 2,471,057 | 339 | 20,344,098 | 88 |

Source: MICAF, Agricultural Marketing Information Division (AMID) & STATIN

During the period 2013-2017, average annual local consumption of Irish potato in Jamaica was 20,344,098 kilograms and of that amount an average of 88% was locally produced. The year 2014 had the highest local consumption 21,819,781 kg of which 90% was produced locally.

During the period 2013-2017 average annual production was 17,873,380kg, average annual imports was 2,471,057kg while average yield was 16,664. Based on those figures, Jamaica would need to plant 148.47 hectares more potatoes in order to be self-sufficient.

Table 6

| Most Desired Varieties of Potatoes (International) | Local Varieties of Potatoes |
|--|-----------------------------|
| Russet Burbank | Spunta |
| Innovator | Draga |
| Ramos | Mondial |
| Yukon Gold | Kennebec |
| Agria | Shepody |
| Fontane | |
| Bintje | |
| Norkotah | |
| Victoria | |

Source: United States Department of Agriculture (USDA), MICAF

Profitability

Cost of Production-Farmgate Margin, 2013- 2017

Table 7

| Year | COP 0.4 Hectare (\$/Kg) | Farmgate (\$/Kg) | Markup (%) |
|------|-------------------------------|---------------------|------------|
| 2013 | 61 | 158 | 259 |
| 2014 | 64 | 145 | 227 |
| 2015 | 69 | 170 | 246 |
| 2016 | 46 | 179 | 389 |
| 2017 | 54 | 181 | 335 |

Source: MICAF, Economic Planning & Policy, Agricultural Marketing Information Division (AMID)

Table 7 shows that it was profitable to produce Irish potato for the years 2013 – 2017, with the percentage difference between the cost of production and farmgate price (markup %) for each year being over 200%. The year 2016 recorded the highest profit margin on investment of 389% while 2014 recorded the lowest of 227%.

Global market situation

Table 8 Fresh or Chilled Potato (excluding seed)

| Unit: US Dollar Thousand (000) | | | | | |
|--------------------------------|----------------------|----------------------|----------------------------|----------------------|----------------------|
| Exporters | Export value in 2013 | Export value in 2014 | Export value in 2015 | Export value in 2016 | Export value in 2017 |
| World | 3,753,591 | 3,252,125 | 2,652,958 | 3,188,695 | |
| France | 687,760 | 442,348 | 394,246 | 525,944 | 496,506 |
| Germany | 495,412 | 288,764 | 235,746 | 302,261 | 332,837 |
| Netherlands | 461,616 | 251,649 | 225,440 | 298,999 | 272,721 |
| Belgium | 227,111 | 170,889 | 134,928 | 182,097 | 175,573 |
| United States of America | 209,544 | 192,278 | 175,771 | 197,241 | 212,871 |
| Egypt | 169,001 | 270,027 | 219,286 | 159,273 | 262,955 |
| Canada | 146,468 | 164,118 | 151,193 | 198,826 | 208,944 |
| Pakistan | 130,263 | 51,196 | 122,499 | 78,150 | |
| China | 126,645 | 270,985 | 226,958 | 225,517 | 279,997 |
| Spain | 121,766 | 81,492 | 973,52 | 124,201 | 99,041 |

Source: International Trade Centre (ITC)

Table 8 shows the top 10 exporters of potatoes (fresh or chilled) in the world with France and Germany boasting the largest export values of US 496,506,000 and US\$33,2837,000 respectively. World exports of potatoes (fresh or chilled) for 2016 amounted to US\$ 3,188,695,000 which represented an increase of 20.2% over the 2015 figure (US\$ 2,652,958,000) in 2015. The world export value for 2017 is unavailable for comparison.

Requirements to export to Target Markets

The member countries of CARICOM have been contacted as potential target markets for Irish potato export from Jamaica. The Plant Quarantine Division of the Ministry of Industry Commerce Agriculture and Fisheries are still awaiting export requirements from majority of the countries.

| Country | Requirement |
|----------------|---|
| Cayman Islands | Inspection and certification (Phytosanitary Certificate |
| Haiti | Potatoes should be washed in 1% bleach solution |

Source: Plant Quarantine Division

Reference

- Ministry of Industry, Commerce, Agriculture & Fisheries, Agricultural Marketing
 Information Division: Irish potato production data, Irish potato area reaped data
- 2. Ministry of Industry, Commerce, Agriculture & Fisheries, Economic Planning & Policy: Irish potato cost of production data.
- 3. Ministry of Industry, Commerce, Agriculture & Fisheries, Irish Potato Production in Jamaica Technical Guide: Agronomic Requirements and Irish Potato Local Varieties
- 4. Statistical Institute (STATIN): Irish Potato import and export data
- 5. Jamaica Agricultural Marketing Information System (JAMIS); farmgate prices
- 6. United States Department of Agriculture (USDA): Irish Potato International Varieties
- 7. International Trade Centre (ITC): Global Irish Potato Exports