Onion Market Profile

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Landscape Information on Onion

Agronomic Requirements

Onions can be grown in all parishes in Jamaica. For commercial production, the crop is best grown in full sunlight in medium-texture loams. Land should be flat and the site chosen should allow for good wind circulation. For the establishment of onions, it is recommended that fields chosen should not have been planted in any member of the onion family for at least five years.

Onions may be direct seeded at a rate of 7-10 kg/ha (3-4 lbs. /acre). Seeds may be planted in rows 20-30 cm (8-12 in) apart and along rows, at 2.5-10 cm (1-4 in) at a depth of 1.25 cm (1/2 in). For direct seedling to be successful, soil must be prepared to a condition that will facilitate mechanical planters.

For onion transplanting, 1.25-2.5 kg/ha or (1-2Ibs./acre) of seeds is needed. Seedlings are to be produced in nursery using polyethylene trays and transplanted when plants are at the two-leaf stage (within six-eight weeks). They should be transplanted to field at the depth similar to what obtained in the trays. Spacing and plant population are similar to that for direct seeding.

Varieties and Time of Planting

Onions are classified as short, intermediate or long-day types, and this reflects the hours of sunlight (day length) which will trigger bulb formation. The day lengths for short, intermediate and long days are less than 12, 12-14 and greater than 14 hours, respectively. The mean monthly sunshine hours between March 12 and September 26, is 12.7 and the onions best suited for this period are the intermediate types. The short-day onions will produce better between September 27 and March 11, with a mean of 11.5 sunshine hours. Jamaica's daily sunshine hours do not exceed 14 hours and thus long-day onions are not grown in Jamaica. Mercedes, Arad, Superex and the Grano type onions are recommended for cultivating between mid-October to December. For March/April planting, Orlando, Caballero, Yellow Granex hybrid and Noam are the varieties which will produce good yields.

Onion Imports (kg) and Local Consumption 2011 to 2017

Table 1

Onion Figures 2011 - 2017				
Years	**Imports (Kg)**	**Production (kg)**	**Est. Consumption**	**Local % of Est. Consumption**
2011	9,511,602	1,015,200	10,526,802	9.6
2012	9,209,913	1,088,173	10,298,086	10.6
2013	8,665,273	679,700	9,344,973	7.3
2014	8,651,227	691,327	9,342,554	7.4
2015	8,307,226	1,161,900	9,469,126	12.3
2016	6,158,222	1,091,750	7,249,972	15.1
2017	P 7,742,968	818,000	8,560,968	9.6
Average	**8,869,048**	**927,260**	**9,796,308**	**10.3**

P-Preliminary Figures

Source: Statin, MICAF

Estimate of Consumption

During the period 2011—2017, the estimated annual local onion consumption was 9,796,308kg, as shown in table 1.

Imports

In 2016 it was observed that the quantity of onions imported was at its lowest amounting to 6,158,222 Kg and peaked in the year 2011 with a total of 9,511,602kg. In 2017, a total of 7,742,968kg was imported, of that amount 96.89% came from the Netherlands.

Market Opportunities

The most current data depicts that locally produced onions accounted for approximately 9.6% of the estimated local consumption. This data suggested that there is an opportunity to further increase onion production and in doing so displace imports.

Table 2

Yield Rates for Onion 2011-2017			
Year	**Production (Kg)**	**Area Reaped (Hectares)**	**Yield per Hectare (Kg)**
2011	1,015,200	95	10,686.32
2012	1,088,173	104	10,463.20
2013	679,700	59	11,520.34
2014	691,327	69	10,019.23
2015	1,161,900	96	12,103.13
2016	1,091,750	78	13,996.79
2017	818,000	69	11,855.07
Source: MOAF, Data Bank & Evaluation Division			

Table 2 shows the yield rates for onion during the period 2011—2017. Jamaica's onion yield peaked in 2016, with a total of 13,996.79kg being produced per hectare. On the world stage, the average yield per hectare was 18,801.3kg/ha in the same year. The Republic of Korea and the USA recorded the highest yields of 65,277kg/ha and 56,397kg/ha, respectively.

Table 3

Hectares required for Onions in order to be self-sufficient			
% of Self-Sufficiency	**11, 855.07kg/ha**	**15,000kg/ha**	**17,000kg/ha**
100%	826.34ha	653.09ha	576.25ha

As stated above, the average local consumption during the period 2011-2017 was 9,796,308kg while the 2017 yield of the commodity was 11,855.07kg/ha. Table 3 shows that in order for Jamaica to become self-sufficient in the production of onions, a total of 826.34ha will have to be planted. If yield increases to 15,000kg/ha then a total of 653.09ha will be required to achieve self-sufficiency while If onion yields averages 17,000kg/ha, then only 576.25ha will be required to achieve self-sufficiency.

Table 4

Year	Onion Profitability (JMD) 2011-2017		% Mark up between C.O.P & Farmgate
	Cost of Production Est. (0.4 hec.) $/kg	Farmgate Price (kg)	
2011	59	144	144.1
2012	84	107	27.4
2013	86	141	64.0
2014	43	153	255.8
2015	61	143	134.4
2016	47	157	234.0
2017	53	170	220.8

Source: MICAF, JAMIS & Economic Planning

Table 4

Table 4 shows that it was profitable to produce onion for the years 2011 – 2017, with the percentage mark up between the cost of production and farmgate price being at a high of 255.8% in 2014 and a low of 27.4% in 2012.

Table 5

Top 10 Producers of Dry Onion worldwide (2016)	
Country Name	**Quantity (kg)000**
China, mainland	23,849,053
India	19,415,425
Egypt	3,115,482
United States of America	3,025,700
Iran (Islamic Republic of)	2,345,768
Turkey	2,120,581
Russian Federation	2,023,271
Pakistan	1,739,054
Bangladesh	1,735,334
Brazil	1,657,441

Source: Faostat

According to the Food and Agriculture Organization of the United Nations a total of 93,168,548tonnes of dry onions were produced worldwide in 2016. China is the largest producer of dry onions, they accounted for 26% of the world's production.

References

- ✓ Ministry of Industry, commerce, Agriculture and Fisheries, Agricultural Marketing Information Division (A.M.I.D) Production Quantities
- ✓ Onion Technical Working Group, Onion Manual; *Growing Onions*
- ✓ Jamaica Statistical Institute of Jamaica (STATIN)
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