



**JAMPRO**  
TRADE & INVESTMENT JAMAICA

# INVESTMENT OPPORTUNITY PROFILE

## SWEET BISCUITS



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# EXECUTIVE SUMMARY

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As part of its mandate to promote trade and investments for Jamaica, Jamaica Promotions Corporation (JAMPRO) has directed its attention to developing packaged investment opportunities profiles (IOPs) for ventures in key growth areas. These opportunities will also creatively reduce Jamaica's import bill as they will rely on locally produced inputs that will replace key import products. These packages detail the strategies required to transform select products with a high import value into lucrative domestic business ventures.

The first phase of the packaging process involved undertaking an extensive assessment of Jamaica's trade statistics with a view to identifying products best suited for competitive import replacement and further, with the potential to expand into viable products for the export market. This Investment Opportunity Profile (IOP) is for Sweet Biscuits and provides a holistic approach geared towards maximizing the returns for the economy, in addition to those of the investor.

The global sweet biscuit industry is estimated at US\$15B and carries a wide assortment of product offerings. Of the different types, short dough biscuit is the most popular and is featured in this IOP.

Critical success factors for this business venture include:

1. Product differentiation through uniquely delicious tastes and exceptional packaging. The former may be achieved through the incorporation of local ingredients as well as by direct import replacement, with improvements sufficient enough to attract consumers loyal to the imported brand(s) as well as new consumers
2. Extensive and intensive research, marketing and promotion, particularly within the first 3 years of the business.
3. Producing biscuits of a consistent quality and ensuring reliable supply at competitive prices.
4. Keeping abreast of industry developments and consumer feedback in order to capitalize on emerging opportunities.
5. There is solid international (7%), regional (16%) and local (8%) demand for sweet biscuits, averaged for the period 2010 to 2014. Coupled with the critical success factors above, the business should be viable. The conservative and scalable 12-year financial model projects initial capital expenditure of J\$34M and year 1 operating expenses and income at J\$84M and J\$5M, respectively. Profit after tax averages J\$16M over the life of the model. The NPV discounted at a rate of 15% is \$51M.



# PRODUCT

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The sweet biscuit product category is vast and contains a wide assortment of unique sub-categories. The global sweet biscuit industry is large (estimated at U\$15 Billion in 2014) and growing at an average rate of 7% between 2010 and 2014. It is highly competitive and a significant number of bakeries enter and leave the industry on an annual basis. With that said, there is still significant scope for growth and improvement in several sub-categories of sweet biscuit and in diverse markets. Furthermore, the increased fast-paced work life has reduced cooking time and fueled the need for convenience foods and snacks, such as sweet biscuits.



The prospective business owner (hereafter referred to as the “Investor”) may explore a range of high-end to low-end biscuits/baked goods options:

- i. Healthy or indulgent. There is growing international demand for healthier snacking options by an increasing market of discerning consumers with relatively strong purchasing power.
- ii. Sweet or salty.
- iii. A further possible product diversification via the manufacturing of snack bars and dried fruits/vegetables inter alia. These may be sold separately or used as ingredients in the standard flour-based commodities.

Biscuits may be broadly categorized into 1 of 4 groupings, distinguished by their recipes and production processes. These are:

- crackers
- hard sweet biscuits
- short dough biscuits
- cookies (including filled cookies)

This IOP will focus on the largest selling biscuit type worldwide: the short dough biscuit. The short dough is more closely related to cake dough, although with much less water. The name refers to their high levels of fat and sugar, which minimizes the gluten network of the dough. The Parle-G (similar to the Barbados’ Shirley and Jamaica’s Shelly brands) is a short dough biscuit ranked the number one selling brand by Nielsen. It should be noted that 4 groupings of biscuits comprise the same basic ingredients, just in varying proportions. An investor may switch production across the different groupings, using the proposed technology with relatively minor adjustments. Aside from its global popularity, the short dough biscuit was selected primarily to demonstrate production process.

The process for making short dough biscuit (and all types for that matter) is information and technology that is readily available and assimilated. Aside from sound business acumen, the distinguishing feature the prospective investor must bring to this opportunity is a unique product taste - be it through the use of local fruit, a new combination of known flavourings or a unique recipe that results in even a slight variation/improvement on an existing taste.

The final decision as to the type(s) of sweet biscuit(s) should be the outcome of research into the science of conceptualized dough mixes. The sample biscuits should then be served to select groupings for detailed feedback, as to the strengths and weaknesses of the product(s). There is a wealth of online information to assist in this research and development exercise. The Scientific Research Council can offer support and information regarding local fruits, herbs and spices and how best to incorporate them in the production process.



# MARKET DEMAND

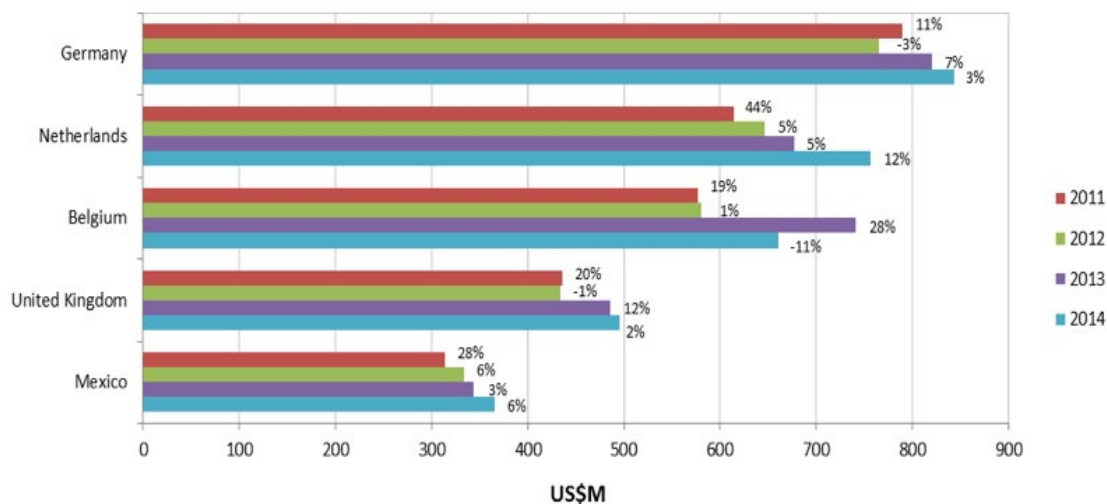
## International

The global production and sale of snacks is a US multi-billion dollar industry (of which sweet biscuit is a subset). As of March 2014, Nielsen calculated global retail annual dollar snack sales at US\$374B, of which Cookies/Cakes accounted for over US\$135B. The largest growing market for snacks was Latin America which registered a 9% improvement over the previous year, for total sales volume of US\$30B. Of that total, Cookies/Cakes accounted for one-third or US\$9B. Cookies/Cakes emerged the fourth favourite snack by global consumers, largely driven by the North American and Asia-Pacific Regions, with respective 2014 market shares of US\$124B and US\$46B. These statistics showcase the size and depth of the larger snack industry. An appreciation of the overall industry is useful as the sub-players can represent indirect competitors. Additionally, it provides insight into the needs to potential customers – necessary for improving product offerings.

Nielsen's global surveys of the top 5 favourite snacks revealed that Cookies/Biscuits ranked 4th with 51% of those surveyed claiming to have consumed same within the last 30 days of the survey date. The leading favourite snack was Chocolate (at 64%). The second and third positions were held by Fresh Fruits (at 62%) and Vegetables (at 52%), respectively. In developing products, the investor should give consideration to the favourite snacks and see how best they can be incorporated into a single product or as part of a line of products, with the objective of capitalizing on as many market segments as possible.

As it relates to sweet biscuits, according to the International Trade Centre (Intracen), the top 5 exporters in 2014 were Germany, Netherlands, Belgium, United Kingdom and Mexico, representing 40% of World exports. The US dollar values exported over the past 4 years are depicted in Chart 1. Germany was the largest exporter for 4 consecutive years with growth rates averaging 5% per annum. Of the 5, the fastest growing exporter was the Netherlands with an average of 17% growth between 2010 and 2014. The continued market dominance of these countries is largely attributable to the maturity of the respective industries.

Chart 1: Top 5 Global Exporters of Sweet Biscuit

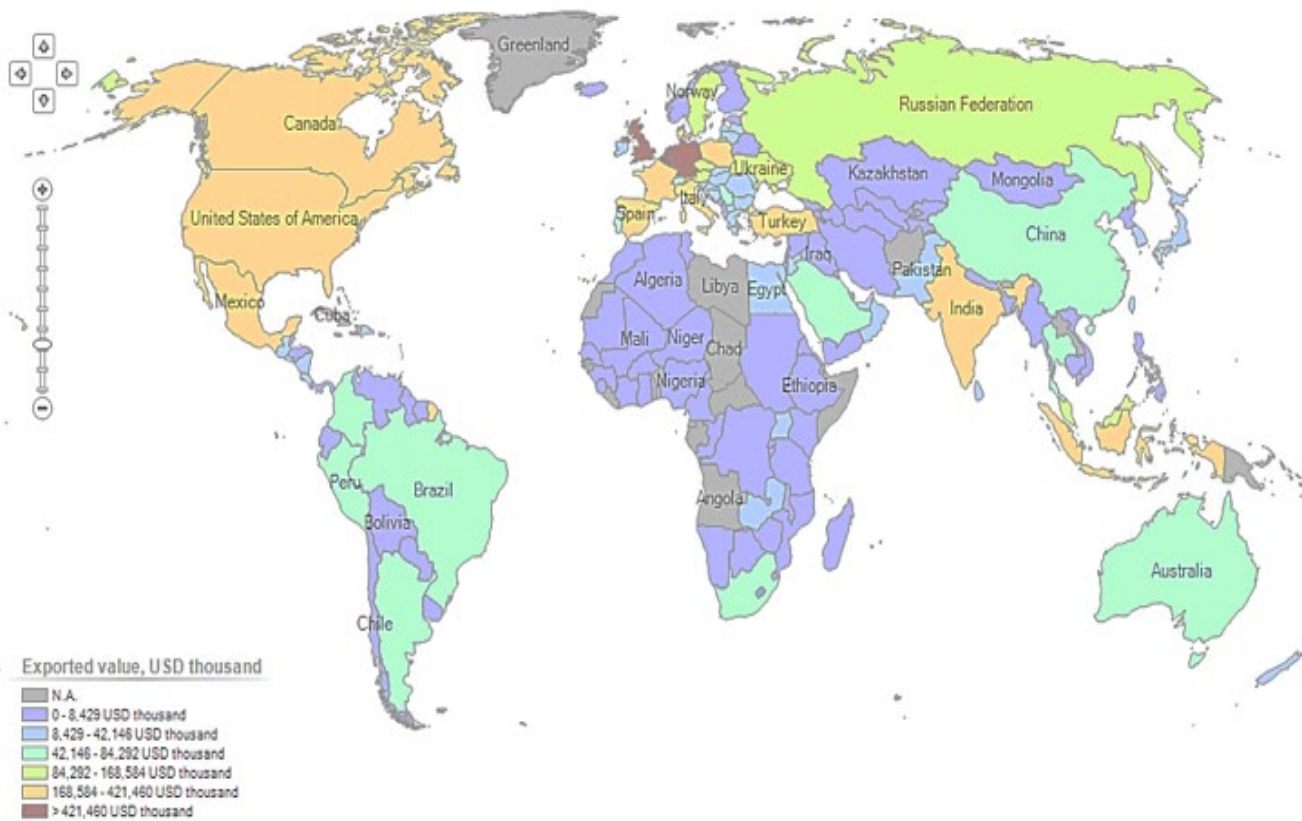


# MARKET DEMAND

Globally, many of the successful companies have been in existence since the beginning of the 20th century and have established a strong presence and reputation. Notwithstanding the forgoing, there are relatively younger firms that are performing well, using the knowledge acquired from the industry and adding some innovation. The Map below provides greater details on global exporters of sweet biscuits.

List of exporters for the selected product in 2014

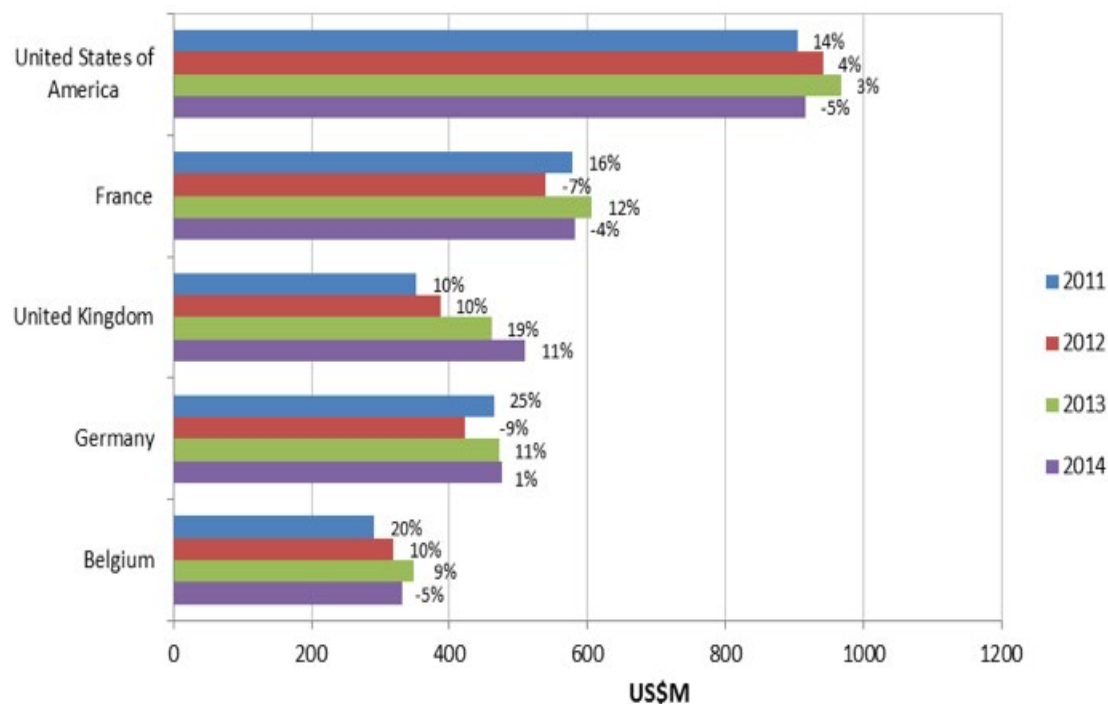
Product : 190531 Sweet biscuits



# MARKET DEMAND

With regards to the top 5 countries that import sweet biscuits, 2014 data from Intracen lists the United States, France, United Kingdom, Germany and Belgium. They represent 36% of World imports. The US dollar value imported over the past 4 years and the annual growth rates are depicted in Chart 2. Whilst 2014 registered negative or low growth rates for all 5, with the exception of the United Kingdom, the average growth over the 2010 to 2014 period has been fairly stable and significant, ranging from 4% to 12%. The United Kingdom's performance was the most impressive with yearly growth rates ranging from 10% (in 2012) to 19% (in 2013). Given the strong diaspora presence and influence, an investor should take note and consider exporting to that market. The second diaspora stronghold, the United States, appears to be contracting in demand for sweet biscuits, falling from a growth rate of 14% in 2011 to -5% in 2014. This does not necessarily suggest that an investor should abandon export opportunities to the country. The United States is still the largest importer, (almost twice the size of its nearest rival) and growth rates will likely return positive. The Map below provides greater details on global importers of sweet biscuits.

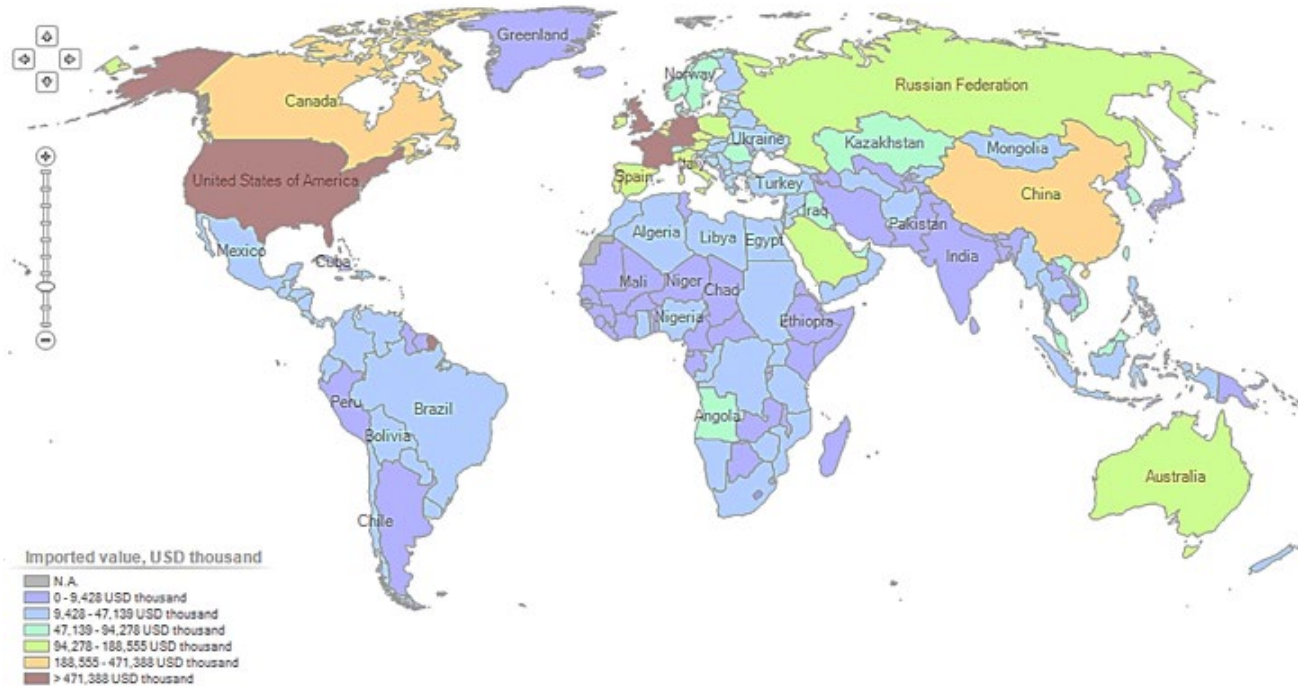
Chart 2: Top 5 Global Importers of Sweet Biscuits



# MARKET DEMAND

List of importers for the selected product in 2014

Product : 190531 Sweet biscuits



While these top importing countries represent potential export markets for the investor, attention should also be given to the faster growing and emerging markets with increasing numbers of medium to high income earners.

Table 1 shows countries with high demand for sweet biscuits and relatively large GDP growth rates (a proxy for wealth). It also shows the effective Ad Valorem Tariff a Jamaican manufacturer would encounter should he wish to export sweet biscuits to the respective country. The Asian and African countries featured prominently in this listing respectively accounting for 11 and 7 of the top 20 importers identified. The value of sweet biscuit imports in the Asian and African countries during 2010 to 2014 were respectively US\$464M and US\$82M or a total of 94% of the average imported value listed below. For these countries, the Ad Valorem Equivalent Tariffs range from 5% to 35%.





# MARKET DEMAND

Table 1: Wealthy Consumers with a High Demand for Sweet Biscuits

Importers	Avg Imported Value in 2010-2014 (US\$'000)	Avg Growth in Imported Value	GDP Growth 2014	Ad Valorem Equivalents Tariff
Democratic Republic of the Congo	13,538	22%	9%	20%
Côte d'Ivoire	6,587	17%	9%	20%
China	158,132	34%	7%	15%
Nigeria	10,242	61%	7%	20%
Panama	15,476	12%	7%	10%
Qatar	23,265	16%	7%	5%
Zambia	6,085	13%	7%	25%
Congo	8,755	17%	6%	35%
Uganda	14,201	33%	6%	25%
Malaysia	36,193	19%	6%	6%
Bolivia	10,582	13%	6%	10%
Viet Nam	47,666	13%	6%	15%
Indonesia	14,208	15%	5%	5%
Colombia	19,718	17%	5%	0%
Kazakhstan	67,392	16%	5%	11%
Maldives	5,034	10%	5%	15%
United Arab Emirates	64,513	10%	4%	5%
Kyrgyzstan	15,939	15%	4%	10%
Algeria	22,691	22%	4%	30%
Bahrain	21,431	90%	4%	5%



# MARKET DEMAND

## Regional

Over the past 5 years (2010 to 2014) the CARICOM region has registered 4% average growth in the export of sweet biscuits. This increase was largely influenced by the performance of the top regional exporters: Trinidad and Tobago (5%); Barbados (3%) and the third and fastest growing, Jamaica (6%). World exports grew an average of 8% over the period, signaling significant expansion opportunities for the CARICOM region, which represents less than 0.2% of global exports. See Table 2. which represents less than 0.2% of global exports. See Table 2.

**Table 2: Major CARICOM Exporters of Sweet Biscuits (US\$'000)**

Exporters	2010	2011	2012	2013	2014	Avg Growth 2010-2014
World	5,898,778	7,101,797	7,196,814	7,800,202	7,827,350	8%
CARICOM	16,096	19,766	17,871	18,392	18,438	4%
Trinidad and Tobago	7,793	9,347	8,969	9,231	9,379	5%
Barbados	5,481	6,293	6,714	6,592	6,210	3%
Jamaica	2,795	4,015	2,157	2,557	2,802	6%

Importation of sweet biscuits in CARICOM grew 7% over the 2010 to 2014 period. This was largely the result of strong positive average growth rates by the top 2 CARICOM importers: Trinidad (14%) and Haiti<sup>1</sup> (47%). The Bahamas and Guyana registered steady average growth of 4% and 5%, respectively. Jamaica registered a moderate 3% average increase in imports, which reflected annual fluctuations in growth over the period and culminated in a 13% decline for 2014. When compared with the export performance, the data suggests that Jamaican consumers can no longer afford to import at the same levels and/or local production has negated the need to import. It also suggests that Jamaica's exports are growing twice as fast as its imports. The increased demand for imports from CARICOM countries and the World imply attractive export opportunities for Jamaica. See Table 3.

**Table 3: Major CARICOM Importers of Sweet Biscuits (US\$'000)**

Importers	2010	2011	2012	2013	2014	Avg Growth 2010-2014
World	5,966,778	6,955,592	7,068,579	7,816,025	7,749,759	7%
CARICOM	48,633	66,753	71,977	76,259	87,323	16%
Haiti	11,473	26,400	29,613	31,775	43,557	47%
Trinidad and Tobago	6,118	7,881	9,275	9,910	10,352	14%
Jamaica	7,898	9,899	8,902	9,898	8,629	3%
Bahamas	5,532	5,945	7,056	6,603	6,389	4%
Guyana	4,143	4,082	4,458	4,622	4,999	5%

<sup>1</sup> Since the year after Haiti's major earthquake in 2010, more than half of the value of the sweet biscuits have been supplied by the neighbouring Dominican Republic (the current number one overall exporter to Haiti).



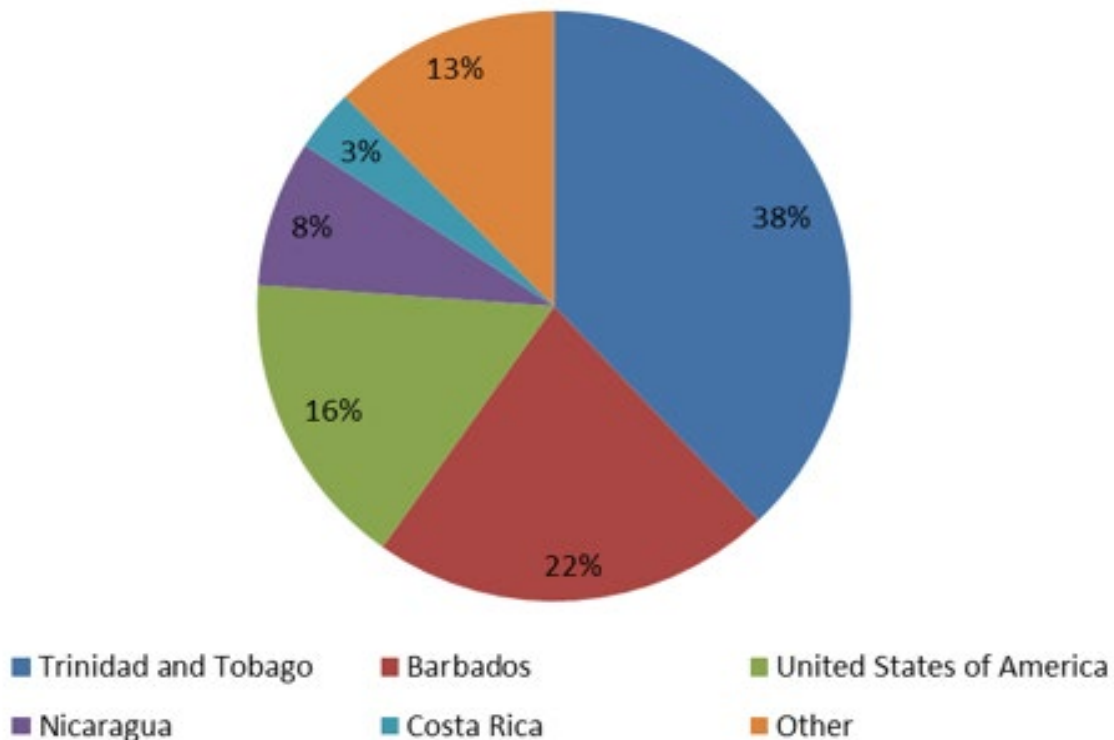
# MARKET DEMAND

## Local

Jamaica has a long and rich history of bakeries. Currently, there are approximately 78 establishments, island wide, and estimated scores of burgeoning micro-scale bakeries (usually operating seasonally during the Christmas and Easter holidays or catering to small coffee shops and offices on a more frequent basis). Of the more prominent establishments, 74 focus solely on baking breads, pastries and cakes and only 4 manufacture biscuits. The latter consist of: National Baking Company (“National”, “Homade” and “HTB” brands), the Jamaica Biscuit Company (“Excelsior” brand), Consolidated Bakeries (“Purity” brand) and LASCO Group of Companies. Jamaica also imports a wide variety of biscuits and these are introduced to the local market principally by 9 importers/distributors.

Sweet biscuits imports to the island in 2013 were valued at US\$10M, reflecting the culmination of 8% average growth over the 4 years prior. Chart 3 shows the major import partners and the respective size of their average contribution over the period. Approximately 60% of the sweet biscuits imported into Jamaica is from CARICOM: Trinidad and Tobago (38%) and Barbados (22%).

Chart 3: Jamaica's Major Import Partners 2013

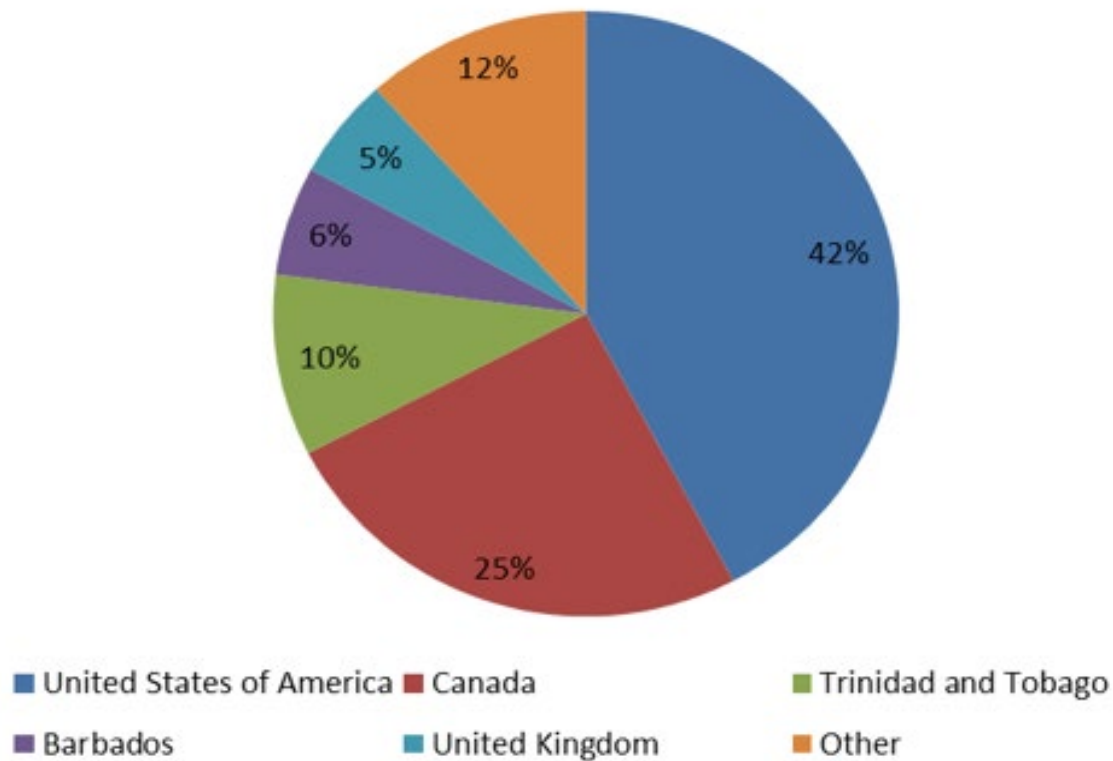


# MARKET DEMAND

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Between 2009 and 2013, Jamaica exported sweet biscuits with yearly average value and growth of US\$2.8M and 8%, respectively. Chart 4 shows the major export markets and their respective proportions as at 2013. The United States and Canada continue to be the top 2 export markets, accounting for 67%.

**Chart 4: Jamaica's Major Export Partners 2013**



# MARKET POSITIONING STRATEGY

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## Niche Marketing

The limited economies of scale available to a local manufacturer advocate a niche market penetrating strategy with emphasis on product differentiation and, as a first step, charging the lowest feasible price. Competitive pricing allows for easier access to the market and eventually, customer loyalty and output expansion. Notwithstanding, there is also scope for the production of high-end specialty biscuits at premium prices – the timing of which should be driven by market research and specifically, trends in consumer spending.

The most important product differentiation is taste. Packaging, design and perceived differentiation through advertising are also important components to niche marketing. The strategy will vary according to the target market. For children, the packaging should be colourful as well as conveniently sized and designed. The inclusion of toys, games or puzzles is a leading form of marketing food to children. For adults, colour and convenience are important factors in addition to information about the product such as ingredients and benefits. The Goodwin Design Group summarizes the key attributes of effective packaging into 5 E's. Packaging should engage, emote, entice, enhance and endure. The specifics are a function of the target age group and their location. Again, market research will feature heavily.

Choosing the product will involve targeted market research, product development and testing same on intended markets. Further, successful bakers often manufacture a diversified product line to satisfy the varied needs of consumers, expand their reach in the industry and mitigate against adverse revenue risks. The investor may consider low-end biscuits as usually found in a supermarket as well as high-end varieties with more exquisite designs and packaging that make for excellent personal and corporate gifts. The Belgian manufacturers are a good example of the latter.

Specific and substantial marketing and promotion will be required to ensure a critical mass of consumers is aware of and know where to purchase the biscuits. The first few years will involve intense marketing and promotion through radio, television and print advertisements; social media; focused and collaborative promotional events; targeting cafeterias of schools and offices inter alia. Marketing and promotional efforts must remain an ongoing practice to ensure the products remain front of mind to existing customers while, at the same time, courting potential consumers.

Moreover, the investor should take a long-term perspective on the business. Most successful global biscuits companies have been in existence upwards of 80 years. While a new investor may now benefit from the lessons learnt from mature manufacturing companies, there is still a learning curve and establishing relationships with intermediary and final clients/consumers takes time. The investor should also keep abreast of the biscuits industry trends, as well as those of indirectly competing industries (such as the Snacks industry) as well as complementary industries (such as the health and organic foods industries).



# MARKET POSITIONING STRATEGY

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## Distribution Channels

Locally, the avenues for product distribution are many and readily accessible. There are over 500 supermarkets/retail outlets and 2,500 schools; at least 24 major events throughout the year, where biscuits can be promoted and sold as well as thousands of offices, restaurants and coffee shops. An immediate constraint to capitalizing on the distribution network is the size of the fleet of delivery vehicles necessary to ensure the shelves are fully stocked and with fresh biscuits and on a regular basis. The 12-year financial model for this IOP proposes, as a first step, targeting major outlets and later, as the finances allow, expand the distribution network across the island and to international markets.

## Competitiveness

To effectively compete in any market a company must have a clear identity (a brand) that is consistently communicated to all. A brand represents a promise to the customer. In developing that brand, there should be a strong understanding of the:

1. Direct and indirect competitors. How are they performing? What are their respective brands? That is, the investor ought to appreciate the 'lay of the land'; determine how best to capitalize on untapped opportunities and create an identity consistent with meeting those goals.
2. Target customers. Will they be sophisticated adults or school children? What are their taste preferences? In Jamaica, a wide cross-section of individuals are targeted by biscuit manufacturers. Arguably, there appears to be greater focus on marketing to children, given the nature of the product and also to develop brand loyalty from an early age. Aside from, perhaps, water crackers, it does not appear that biscuits are created for and/or marketed to adults. This may signal a unique opportunity for an investor. Global trends reveal that longer work hours are increasing the demand for snacks as meal replacements. Investigating and meeting the snack needs of adults may result in a huge gain and secure a market of adults who currently purchase what is available, for lack of options.
3. Product. Will it be low-priced, high-quality, health-focused? Which channels will be used to distribute and advertise the product?
4. Having developed an identity, branding should be integrated in every aspect of the business. Such as in how the phones are answered, in marketing, packaging and advertising. A good product and consistent delivery, underpinned by solid research based branding is the recommended way to compete.
5. There is a relatively young Jamaican company that has grown leaps and bounds in the more competitive segment of the local bakery industry. They attribute their success to a uniquely delicious taste that has captured the interest of local and international consumers. The other major contributing brand features include: consistent product quality and reliability of supply as stipulated in their respective contracts. These 3 tools are crucial to the success of any new entrant (and existing player) in the industry.



# MARKET POSITIONING STRATEGY

6. Jamaica is rich with flavours. There is a deep variety of local fruits, spices and herbs which can be employed as the base for uniquely delicious biscuits. Equally, alternate sources of flour (for example, from breadfruit and cassava) can contribute to product differentiation that may infiltrate the more health conscious market segment. This differentiation will allow for successful competition in local and international markets.
7. The current ratio of local to overseas sweet biscuits stocked on supermarket shelves is 20:80, on average. There are encouraging signs of import replacement by local manufacturers through the introduction of greater product diversity that compete directly and indirectly with biscuits from overseas and at comparable prices. Excelsior's Guava Cheese sandwich biscuits; Purity's Miss Birdie's health-focused and tasty crackers and National's "Cheezy Voltz" are examples of recent innovations in the domestic market. The 20:80 ratio suggests there remains significant scope for local producers to claim greater market shares.

## SWOT

<p style="font-size: 2em; color: #008000; font-weight: bold;">S</p> <p><b>STRENGTHS</b></p> <ul style="list-style-type: none"> <li>• Wide assortment of locally available ingredients to create uniquely delicious biscuits</li> <li>• Low final product price</li> <li>• Production Plant's ease of scalability and multi-product output</li> <li>• Fairly established local industry</li> </ul>	<p style="font-size: 2em; color: white; font-weight: bold;">W</p> <p><b>WEAKNESSES</b></p> <ul style="list-style-type: none"> <li>• Short shelf life</li> <li>• High initial cost outlay</li> <li>• High production costs (raw materials, marketing &amp; distribution; energy)</li> <li>• Extensive and ongoing product marketing and promotions</li> </ul>
<p style="font-size: 2em; color: yellow; font-weight: bold;">O</p> <p><b>OPPORTUNITIES</b></p> <ul style="list-style-type: none"> <li>• Substitution of imported with local raw materials. Such as bleached wheat flour with that cassava and breadfruit flour. It is a healthier option for an increasingly discerning market. The production of non-wheat flour is a potential investment opportunity to support the sweet biscuits and other industries, locally and abroad</li> <li>• Expansive and deep demand for diversified product offerings, globally</li> <li>• Proximity to and existing links with major trading partners</li> <li>• Capitalizing on the strength of Jamaican brand.</li> <li>• Enabling business environment as it relates to the ease of starting a business, access to financing and tax reform and simplification</li> </ul>	<p style="font-size: 2em; color: white; font-weight: bold;">T</p> <p><b>THREATS</b></p> <ul style="list-style-type: none"> <li>• Competition from established brands in a bid to protect their market share &amp; also from direct imports</li> <li>• Exorbitant fees, charges (via Customs) and taxes (via TAJ) on the manufacturing sector and GoJ shifting policy stances in this regard</li> <li>• GoJ's strong fiscal appetite for revenue</li> <li>• Business Extortion Crimes</li> </ul>



# PRODUCTION PROCESS

The Production Plant detailed in this IOP is designed to produce the short dough biscuit, which is characterized as dough with relatively high fat to water content mix. The Production Process is semi-automated and involves the following steps:

1. **Dough Mixing:** Here the ingredients such as flour, fat, sugar, nuts, water, flavorings and other chemicals are mixed to make short dough biscuits. The Dough Mixer machine consists of two blades which rotate in opposite directions and at different speeds in order to achieve the required gluten network required for the biscuit type.
2. **Rotary Moulding:** The mixed dough is channeled into the hopper and a roller forces the dough into the cavities of the moulding roller, where it is uniformly engraved and coated with food-grade Teflon. Later, an adjustable rubber roller with a discharge cotton web, transfers the molded pieces from the roller on to the web.
3. **Baking in a Tunnel Gas Oven:** The molded pieces are conveyed along a 40 feet tunnel gas oven at a temperature of 180°C for approximately 5-10 minutes.
4. **Oil Spraying:** The biscuits are lightly sprayed with oil to enhance the taste of the biscuit and assist in extending the shelf life.
5. **Cooling on a Conveyor belt:** The baked and sprayed biscuits are cooled on a moving conveyor belt. The cooling process also hardens the biscuits, which tend to be soft and malleable immediately after baking.
6. **Stacking:** At the end of the cooling conveyor, the stacking machine collects the biscuits and directs them into lanes for ease of handling.
7. **Packaging:** The biscuits are packaged in an automated in a high-speed machine.

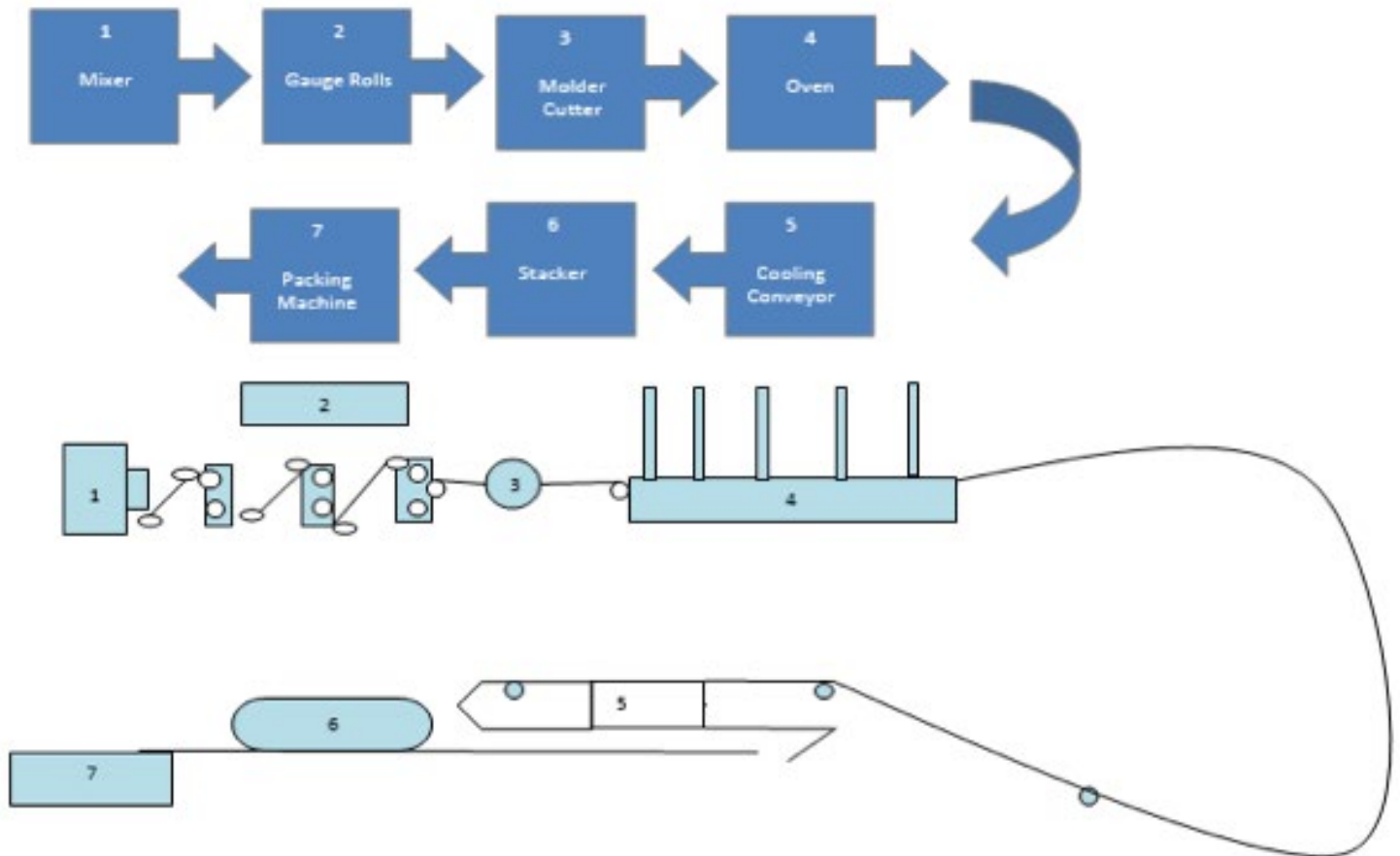




# PRODUCTION PROCESS

The Chart below is a graphical depiction of the of the production process.

## SWEET BISCUIT PRODUCTION LINE



# COMPLEMENTARY BUSINESS OPPORTUNITIES

The investor may consider vertical and horizontal integration as complementary business opportunities for further consideration. These include:

1. Dehydration Facilities for the creation of non-traditional flours (e.g. cassava and breadfruit); fruit granules and chunks (e.g. mangoes, jackfruit and otaheite) as well as herbs and spices could serve as a useful source of product diversification. The demand for gluten-free and healthier biscuit options is an expanding global market, which could be served with the incorporation of dehydrated products. They may also be packaged as standalone snacks and provide product diversification as well as an additional source of revenues. An additional benefit is that properly dried and sealed fruits are rich in flavor and can last for over 18 months.
2. Gourmet Biscuits: High-end biscuits make attractive personal or corporate gifts ideas and should equally make for a good business venture. Gourmet biscuits are characterized by higher quality and unique ingredients such as gluten-free flour, organic, rare fruit preserves and nuts, sugar substitutes and a variety of other options. They are a delicious indulgence, with a shorter shelf life and for a premium price.
3. Packaging quality and standards have been improving in recent years but there is room for growth in the local biscuit industry and in general. Attractive packaging is, arguably, as strong a part of product differentiation as is the taste. It is true that packaging companies have failed to be successful in the Jamaican business environment - citing high costs of business. Those circumstances may not have changed for the traditional brick-and-mortar company but the investor may want to give thought to a more facilitatory virtual business. That is, develop a database of good and trusted suppliers and hand-hold the prospective buyer through the process of designing and procuring the desired packaging.
4. Marketing and Promotion is the driver of growth in any biscuit business. If the customer is not aware of the product a sale will never be made. With so many competitors seeking their attention, it can be an arduous task to break into the market (for new entrants) and to maintain presence (for existing businesses). As marketing and promotion can be an expensive undertaking for one firm, and investor may consider capitalizing on economies of scale by developing and selling these services to new and existing companies.
5. Distribution Network: Similarly, the distribution of biscuits Island wide to thousands of locations can be challenging for any business. The investor could consider selling these services for an additional stream of revenue.



# FINANCIAL MODEL

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The key assumptions underlying the financial model (see Annex A for details) include:

1. General Assumptions:
  - a. The investor is either an approved manufacturer or is provisionally approved by the MIIC and therefore qualifies for the incentives available under the Omnibus Legislation. Consequently, import duties are calculated at 0% on all capital equipment and imported raw materials used in the production process.
  - b. A planning horizon of 12 years where production commences January 2017 and pre-production preparations begin 12 months prior to opening.
  - c. Purchasing Power Parity in estimating the exchange rate between the US and Jamaican dollars. The forecasted inflation rates are 2.5% and 6%, for the respective countries.
2. The Plant and Capital Expenditure:
  - a. The Plant size deemed feasible will have an installed capacity to produce 100kg of biscuit per hour, however, the effective capacity will be capped at 90kg of biscuit per hour. For the first 2 years, average capacity is assumed to be 70% and will yield daily output 700kg, for a single shift of 10 hours per day and for 264 days each year. For the 3rd and 4th years, capacity will be increased to 85% and then to 100% thereafter. Wastage/Conversion is estimated at 1% of output per annum over the life of the model. The Plant will employ 9 factory workers both skilled and semi-skilled and 3 administrative staff. The factory space is 10,000 square feet leased at cost of J\$500,000 per month or J\$6M per annum.
  - b. The initial Capital Outlay is projected at J\$34M (or US\$270,853). The required equipment and works; their costs and percentage cost allocations are outlined in the Sources and Uses section of the Financial Model. The assumptions for capital allowances take into consideration the provisions under the Fiscal Incentives Act.<sup>2</sup>
  - c. Capital expenditure will be financed by a loan (77%) and equity (23%). The loan attracts an interest rate of 15%, with a term of 8 years (no moratorium) and monthly repayments. Annex B provides a snapshot of Select Loan Options available for an undertaking of this nature. The Average Debt Service Ratio is 4.67%.
  - d. In year 6, the semi-automated production unit is replaced and 2 additional work vehicles are added to the fleet. This is funded from internal cash flow.
3. Revenues:
  - a. Revenues in year 1 is J\$89M and increases annually at an average rate of 8% to J\$202M in the 12th and final year. The model assumes a product weight of 50g at an initial price of J\$27 (or US\$0.21) which remains constant over first 3 years then steps up by the projected inflation of 6% in years 4 and 5. Thereafter, annual inflation rates are applied. The capacity assumptions explained above also factor into the revenue levels observed.

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<sup>2</sup> It should be noted that General Consumption Tax (GCT) on equipment/materials must be paid upfront at the port of entry – with full refunds applicable within 30 days.



# FINANCIAL MODEL

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4. Operating Expenses:
  - a. Subdivided into Direct and Indirect Costs of 48% and 52%, respectively. Year 1 expenses are J\$84M and grow each year by inflation of 6% to J\$156M in Year 12. The major cost drivers are: Raw Materials (30%); Gross Emoluments for Staff (18%); Selling & Distribution (10%); Facility Lease (7%) and Utilities (8%). Employment Tax Credit is not reflected in the financial model.
5. Financial Statements:
  - a. The model generates positive annual profit after tax for years 3 through 12 – averaging \$20M and ranging between J\$5M and J\$31M.
  - b. Net Cash Flows from Operations are healthy averaging J\$27M and ranging from -J\$3M in year 2 to J\$47M in the final year.
6. Return on Equity:
  - a. The model generates a sound Internal Rate of Return (IRR) of 40% and Net Present Value (NPV) of \$51M at a discounted rate of 15%.
7. Scalability:
  - a. The model primarily presents as the lowest economic unit for feasible production. Within this scope growth is achieved over the twelve (12) year period through greater efficiencies rather than expansion. The following treats with the assumption that the Investor is more interested in (a) capturing market-share and (b) maximizing the output/profitability of his/her investment. Underlying assumptions include: The target market as identified as the population of 10 to 19 years old in Jamaica (approximately 522K individuals based on STATIN 2013 data); that the target market consumes at least two (2) packs of the product each week in a fifty-two (52) week year; and finally, that the company is able to consistently move its product to thirty percent (30%) of this target audience every week. These assumptions create an estimated annual demand of 18.5M packs – or more than 300% of the current model's production projections.
  - b. There are four general models available for scaling: (a) increased production hours – by introducing additional work shifts; (b) duplication of plant machinery; (c) introduction of new machinery with higher output levels; and finally (d) some combination of the previous three.
  - c. Initial scaling would apply Scale Model A through the addition of a work shift, doubling production hours from 10 to 20 and doubling the resources necessary to support the additional work shift thereby increasing production output from 26% of estimated demand to 51%. The assumption is that these changes only affect inputs into the Cost of Production, creating an opportunity for significantly greater profitability. Holding all other assumptions fixed – this leads to a doubling in revenues and key areas of operating expenses (labour, supplies) but lowers the projected useful lifetime of the equipment as well. This initial scaling generates positive annual profit after tax for years 1 through 12 – averaging \$148M and ranging between \$22M (year 2) and \$136M (year 12). With this kind of scaling, the Internal Rate of Return (IRR) rises to 240% and the Net Present Value (NPV) of \$285M at a discounted rate of 15%.
  - d. Scaling in order to meet 75% of the estimated market demand would require the production of 14M packs of biscuits per annum. This goal is above and beyond the currently capacity of the machinery recommended. With this consideration the scaling model suggested – based on capturing greater shares of the market's estimated demand - becomes Scale Model D. That is, the introduction of machinery with higher output is added into the production process and an additional work shift is created.



## ANNEX A – FINANCIAL MODEL

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### INVESTMENT OPPORTUNITY PROFILE: SWEET BISCUITS FINANCIAL MODEL

#### SCHEDULES

- I COVER PAGE
- II ASSUMPTIONS
- III SOURCES AND USES
- IV REVENUE
- V EXPENSE
- VI FINANCIAL STATEMENTS
- VII RETURN ON EQUITY



## INVESTMENT OPPORTUNITY PROFILE: SWEET BISCUITS Assumptions

<i>Project General Assumptions</i>	Ops. Start Date
Project Operating Commencement Date	1-Jan-17
<b>FINANCING</b>	
<i>Initial Financing</i>	
Equity	7,612 23%
Loan Facilities	26,000 77%
One	- 0%
Two	- 0%
Total	33,612 100%
<b>Ownership</b>	
1 Sponsors	7,612 100%
2 Owner 2	- 0%
3 Owner 3	- 0%
4 Owner 4	- 0%
<b>OTHER FINANCIAL ASSUMPTIONS/CONSIDERATIONS</b>	
Construction Starts On: (Column 1 = No. of Months after Proj. Conn.)	
Interest Rate	12.0 1-Jan-16
- Treasury	n.a.
- Spread	n.a.
Commitment fee	3/8 of 1%
Up - Front Fees	2%
Interest Rate:	n.a.
Basis	n.a.
Spread	n.a.
Annual Rate of Interest	15.00%
Loan Term Years	8
Payments Per Year	12
Mortuorium (months)	-
Average DSC Ratio:	4.67
Minimum	(0.02)
Maximum	10.23
Average Loan Life	4.50



## INVESTMENT OPPORTUNITY PROFILE: SWEET BISCUITS

### Assumptions

INDIRECT COSTS		ECONOMICS	Exchange Rate (J\$:\$US\$)	J\$:CPI	US\$:CPI
Indirect Labour Cost - Gross monthly remuneration		-1			
General Manager (1)	300 J\$000	2015	120.00	8%	2.50%
Marketing Assistant (1)	130 J\$000	2016	124.10	6%	2.50%
Security (1)	60 J\$000	2017	128.34	6%	2.50%
Marketing & Promotions	4,188 J\$000	2018	132.72	6%	2.50%
Licences and Permits	700 J\$000	2019	137.25	6%	2.50%
Maintenance	2,199 J\$000	2020	141.94	6%	2.50%
Selling & Distribution	8,144 J\$000	2021	146.78	6%	2.50%
Facility Lease	6,000 J\$000	2022	151.79	6%	2.50%
Utilities	6,840 J\$000	2023	156.98	6%	2.50%
Other Contracted Services	2,327 J\$000	2024	162.34	6%	2.50%
Contingency @ 15%	4,560 J\$000	2025	167.88	6%	2.50%
		2026	173.61	6%	2.50%
		2027	179.54	6%	2.50%
		2028	185.67	6%	2.50%
Minimum Cash Balance	500 J\$000	2029	192.01	6%	2.50%
Tax Rate	25.00%	2030	198.57	6%	2.50%
		2031	205.35	6%	2.50%
		2032	212.36	6%	2.50%
		2033	219.61	6%	2.50%
		2034	227.11	6%	2.50%



## INVESTMENT OPPORTUNITY PROFILE: SWEET BISCUITS

### Sources and Uses

Phase One EQUIPMENT COSTS	Total Cost		%age of Total Cost
	J\$000 Amount	US\$000 Amount	
1 Model Dough Mixer	620	5.000	1.85%
2 Model 250 Forming Machine for Soft Biscuit	1,241	10.000	3.69%
3 Forming Machine Control Console	65	0.520	0.19%
4 Model 250 Salt & Sugar Spreader	149	1.200	0.44%
5 Model 250 Oven	3,723	30.000	11.08%
6 Transmission for Oven	124	1.000	0.37%
7 Control Console for Oven	149	1.200	0.44%
8 Model 250 Oil Sprayer	434	3.500	1.29%
9 Model 250 Cooling Conveyor and Collection Plate	558	4.500	1.66%
10 Packaging Machine	1,129	9.100	3.36%
11 Compressor	89	0.720	0.27%
12 AC Units	1,100	8.864	3.27%
13 Air Extractor Fans	2,482	20.000	7.38%
14 Rennovation (ind Fixtures & Fittings, Customization etc)	2,482	20.000	7.38%
15 Office Furniture & Equipment	745	6.000	2.22%
16 Shipping, Customs, Transportation Costs	3,312	26.688	9.85%
17 Installation	839	6.760	2.50%
18 Contingency	1,509	12.16	4.49%
<b>Total Equipment Cost</b>	<b>20,751</b>	<b>167.212</b>	<b>61.74%</b>
<b>Other Capital Cost</b>			
Work Vehide (3)	11,169	90.000	33.23%
Pre-Development Cost: R&D; Initial Certification, Training etc	521	4.200	1.55%
Legal Fees & Other Fees	62	0.500	0.18%
Organisational Costs	-	-	0.00%
	<b>11,752</b>	<b>94.700</b>	<b>34.96%</b>
<b>Financing Cost</b>			
Upfront Closing Fees	520	4.333	1.55%
Financing & Legal Cost	372	3.000	1.11%
Interest During Construction	-	-	0.00%
Initial Working Capital	217	1.750	0.65%
<b>Total</b>	<b>33,612</b>	<b>270.996</b>	<b>100.00%</b>
<b>FINANCING</b>			
Equity	7,612	61.340	22.65%
Loan Amount	26,000	209.513	77.35%
<b>Total Amount</b>	<b>33,612</b>	<b>270.853</b>	<b>100.00%</b>



## INVESTMENT OPPORTUNITY PROFILE: SWEET BISCUITS

### Revenue

(J\$ '000)

	1	2	3	4	5	6	7	8	9	10	11	12
	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028

Fraction of Year	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
US\$ CPI	n.a.	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%
J\$ CPI	n.a.	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%
J\$ GDP Deflator	n.a.	106.0%	112.4%	119.1%	126.2%	133.8%	141.9%	150.4%	159.4%	168.9%	179.1%	189.8%

### Revenues:

Sweet Biscuits													
Production (Kgs)	237,600	237,600	237,600	237,600	237,600	237,600	237,600	237,600	237,600	237,600	237,600	237,600	237,600
Waste/Conversion (Kg)	2,376	2,376	2,376	2,376	2,376	2,376	2,376	2,376	2,376	2,376	2,376	2,376	2,376
%age Capacity Usage	70%	70%	85%	85%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Price per Kg	540.0	540.0	540.0	572.4	572.4	606.7	643.1	681.7	722.6	766.0	812.0	860.7	
<b>Total Annual Revenue</b>	<b>88,914.67</b>	<b>88,915</b>	<b>107,968</b>	<b>114,446</b>	<b>134,642</b>	<b>142,721</b>	<b>151,284</b>	<b>160,361</b>	<b>169,983</b>	<b>180,182</b>	<b>190,993</b>	<b>202,452</b>	

## INVESTMENT OPPORTUNITY PROFILE: SWEET BISCUITS

### OPERATING EXPENSE ASSUMPTIONS

(\$' 000)

	0	1	2	3	4	5	6	7	8	9	10	11	12
	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	
Fraction of Year	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Je CPI	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%
GDP Deflator	100.00%	106.0%	112.4%	119.1%	126.2%	133.8%	141.9%	150.4%	159.4%	168.9%	179.1%	189.8%	
<b>DIRECT COSTS</b>													
Flour	11,485	12,174	12,904	13,679	14,499	15,369	16,292	17,269	18,305	19,404	20,568	21,802	
Fat (Vegetable Shortening)	5,537	5,869	6,221	6,594	6,990	7,409	7,854	8,325	8,824	9,354	9,915	10,510	
Sugar	4,969	5,267	5,583	5,918	6,273	6,650	7,049	7,472	7,920	8,395	8,899	9,433	
Liquid Glucose	1,278	1,355	1,436	1,522	1,613	1,710	1,813	1,922	2,037	2,159	2,289	2,426	
Dried fruit/nuts; milk powder; raising agents; Flavours etc	1,861	1,973	2,092	2,217	2,350	2,491	2,641	2,799	2,967	3,145	3,334	3,534	
Direct Labour Cost:													
Workers	7,196	7,628	8,086	8,571	9,085	9,630	10,208	10,821	11,470	12,158	12,888	13,661	
Supervisor/Technician	1,800	1,908	2,022	2,144	2,272	2,409	2,553	2,707	2,869	3,041	3,224	3,417	
Packaging	5,817	6,166	6,536	6,928	7,344	7,785	8,252	8,747	9,272	9,828	10,418	11,043	
Transportation of Raw Materials	3,490	3,700	3,922	4,157	4,406	4,671	4,951	5,248	5,563	5,897	6,251	6,626	
	43,434	46,040	48,802	51,730	54,834	58,124	61,611	65,308	69,227	73,380	77,783	82,450	

### INDIRECT COSTS

Indirect Labour Cost - Gross monthly remuneration

General Manager (1)	3,600	3,816	4,045	4,288	4,545	4,818	5,107	5,413	5,738	6,082	6,447	6,834
Marketing Assistant (1)	1,560	1,654	1,753	1,858	1,969	2,088	2,213	2,346	2,486	2,636	2,794	2,961
Security (1)	720	763	809	858	909	964	1,021	1,083	1,148	1,216	1,289	1,367
Marketing & Promotions	4,188	4,440	4,706	4,988	5,288	5,605	5,941	6,298	6,676	7,076	7,501	7,951
Licences and Permits	700	742	787	834	884	937	993	1,053	1,116	1,183	1,254	1,329
Maintenance	2,199	2,331	2,471	2,619	2,776	2,943	3,119	3,307	3,505	3,715	3,938	4,174
Selling & Distribution	8,144	8,633	9,151	9,700	10,282	10,898	11,552	12,245	12,980	13,759	14,585	15,460
Facility Lease	6,000	6,360	6,742	7,146	7,575	8,029	8,511	9,022	9,563	10,137	10,745	11,390
Utilities	6,840	7,250	7,685	8,147	8,635	9,153	9,703	10,285	10,902	11,556	12,249	12,984
Other Contracted Services	2,327	2,466	2,614	2,771	2,938	3,114	3,301	3,499	3,709	3,931	4,167	4,417
Contingency @ 15%	4,560	4,560	4,560	4,560	4,560	4,560	4,560	4,560	4,560	4,560	4,560	4,560
	40,838	43,015	45,322	47,768	50,360	53,108	56,021	59,109	62,382	65,851	69,528	73,426

**INVESTMENT OPPORTUNITY PROFILE: SWEET BISCUITS**  
**BOOK FINANCIAL STATEMENTS**  
**(\$'000 UNLESS INDICATED)**

	0	1	2	3	4	5	6	7	8	9	10	11	12
	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028

**INCOME STATEMENT**

Revenues													
Sweet Biscuits	-	88,915	88,915	107,968	114,446	134,642	142,721	151,284	160,361	169,983	180,182	190,993	202,452
Net Revenue	-	88,915	88,915	107,968	114,446	134,642	142,721	151,284	160,361	169,983	180,182	190,993	202,452
Expenses:													
Direct Costs													
Raw Materials	-	25,130	26,638	28,236	29,930	31,726	33,629	35,647	37,786	40,053	42,456	45,004	47,704
Staff Cost	-	8,996	9,536	10,108	10,715	11,358	12,039	12,762	13,527	14,339	15,199	16,111	17,078
Transportation of Raw Materials	-	3,490	3,700	3,922	4,157	4,406	4,671	4,951	5,248	5,563	5,897	6,251	6,626
Other Direct Costs	-	5,817	6,166	6,536	6,928	7,344	7,785	8,252	8,747	9,272	9,828	10,418	11,043
Indirect Costs													
Indirect Labour Cost - Gross monthly remuneration	-	5,880	6,233	6,607	7,003	7,423	7,869	8,341	8,841	9,372	9,934	10,530	11,162
Marketing & Promotions	-	4,188	4,440	4,706	4,988	5,288	5,605	5,941	6,298	6,676	7,076	7,501	7,951
Licences and Permits	-	700	742	787	834	884	937	993	1,053	1,116	1,183	1,254	1,329
Maintenance	-	2,199	2,331	2,471	2,619	2,776	2,943	3,119	3,307	3,505	3,715	3,938	4,174
Selling & Distribution	-	8,144	8,633	9,151	9,700	10,282	10,898	11,552	12,245	12,980	13,759	14,585	15,460
Facility Lease	-	6,000	6,360	6,742	7,146	7,575	8,029	8,511	9,022	9,563	10,137	10,745	11,390



INVESTMENT OPPORTUNITY PROFILE: SWEET BISCUITS  
 BOOK FINANCIAL STATEMENTS  
 J\$800 UNLESS INDICATED

	0	1	2	3	4	5	6	7	8	9	10	11	12
	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Utilities	-	6,840	7,250	7,685	8,147	8,635	9,153	9,703	10,285	10,902	11,556	12,249	12,984
Other Contracted Services	-	2,327	2,466	2,614	2,771	2,938	3,114	3,301	3,499	3,709	3,931	4,167	4,417
Contingency @ 15%	-	4,560	4,560	4,560	4,560	4,560	4,560	4,560	4,560	4,560	4,560	4,560	4,560
<b>Total Operating Expenses</b>	-	84,271	89,054	94,124	99,498	105,194	111,232	117,632	124,417	131,608	139,231	147,311	155,876
<b>Operating Income</b>	-	<b>4,643</b>	<b>(140)</b>	<b>13,844</b>	<b>14,948</b>	<b>29,448</b>	<b>31,489</b>	<b>33,652</b>	<b>35,944</b>	<b>38,375</b>	<b>40,951</b>	<b>43,681</b>	<b>46,576</b>
Depreciation - Book	-	4,338	4,338	4,338	4,338	4,338	9,031	9,031	9,031	4,693	4,693	4,693	4,693
Amortization - Fin./Org Cost	-	318	318	318	318	318	-	-	-	-	-	-	-
Interest (Income)/Expense	-	-	-	-	-	-	-	-	-	-	-	-	-
Interest Expense	-	3,655	3,170	2,686	2,207	1,716	1,231	746	263	0	0	0	0
Profit Before Taxes (PBT)	-	(3,668)	(7,966)	6,502	8,085	23,076	21,226	23,874	26,650	33,682	36,258	38,988	41,883
Tax Provision	-	917	1,992	(1,626)	(2,021)	(5,769)	(5,307)	(5,968)	(6,663)	(8,420)	(9,064)	(9,747)	(10,471)
Profit After tax	-	(2,751)	(5,974)	4,876	6,064	17,307	15,919	17,906	19,987	25,262	27,194	29,241	31,412
Partner's Share of Book Income													
Sponsors	-	(2,751)	(5,974)	4,876	6,064	17,307	15,919	17,906	19,987	25,262	27,194	29,241	31,412
Owner 2	-	-	-	-	-	-	-	-	-	-	-	-	-
Owner 3	-	-	-	-	-	-	-	-	-	-	-	-	-





**INVESTMENT OPPORTUNITY PROFILE: SWEET BISCUITS**  
**BOOK FINANCIAL STATEMENTS**  
**(\$'000 UNLESS INDICATED)**

	0	1	2	3	4	5	6	7	8	9	10	11	12
	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Capital Contributions	-	4,616	5,870	-	-	-	-	-	-	-	-	-	-
Capital (Distribution)	-	-	-	(7,249)	(9,968)	(23,997)	(25,714)	(30,683)	(33,608)	(38,596)	(41,282)	(44,107)	(47,082)
Borrowing under Construction Loan	-	-	-	-	-	-	-	-	-	-	-	-	-
Construction Loan Repayment	-	-	-	-	-	-	-	-	-	-	-	-	-
Borrowing under Term Loan	26,000	-	-	-	-	-	-	-	-	-	-	-	-
Principle Repayment	-	(3,250)	(3,250)	(3,250)	(3,250)	(3,250)	(3,250)	(3,250)	(3,250)	(3,250)	(3,250)	(3,250)	(3,250)
Debt Issuance Cost	-	(961)	-	-	-	-	-	-	-	-	-	-	-
Net Cash Provided by Fin. Activities	35,863	730	2,620	(10,499)	(13,218)	(27,247)	8,580	(33,933)	(36,858)	(38,596)	(41,282)	(44,107)	(47,082)
Net Inc. / (Dec.) In Cash and Equivalents	-	500	-	-	-	-	-	-	-	-	-	-	-
Cash & Equivalents at Beginning of Year	-	-	500	500	500	500	500	500	500	500	500	500	500
Cash & Equivalents at End of Year	-	500	500	500	500	500	500	500	500	500	500	500	500
Equity Contribution (Distribution)	-	4,616	5,870	(7,249)	(9,968)	(23,997)	(25,714)	(30,683)	(33,608)	(38,596)	(41,282)	(44,107)	(47,082)

**BALANCE SHEET**

<b>Fixed Assets</b>													
Property Plant and Equipment	35,863	35,560	35,560	35,560	35,560	35,560	73,104	73,104	73,104	73,104	73,104	73,104	73,104

INVESTMENT OPPORTUNITY PROFILE: SWEET BISCUITS  
 BOOK FINANCIAL STATEMENTS  
 J\$000 UNLESS INDICATED

	0	1	2	3	4	5	6	7	8	9	10	11	12
	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Accumulated Depreciation	-	(4,338)	(8,677)	(13,015)	(17,353)	(21,692)	(30,723)	(39,754)	(48,786)	(53,479)	(58,172)	(62,865)	(67,558)
Net PP & E	35,863	31,221	26,883	22,545	18,206	13,868	42,381	33,350	24,318	19,625	14,932	10,239	5,546
Deferred Debt Issue Costs net of Accumulated amortization	-	769	577	384	192	-	-	-	-	-	-	-	-
Deferred Organization Costs net of Accumulated amortization	-	503	377	251	126	(0)	-	-	-	-	-	-	-
	35,863	32,493	27,837	23,181	18,524	13,868	42,381	33,350	24,318	19,625	14,932	10,239	5,546
<b>Current Assets</b>													
Accounts Receivable	-	7,039	7,039	8,547	9,060	10,659	11,299	11,977	12,695	13,457	14,264	15,120	16,027
Deferred Tax Asset	-	2,005	1,770	1,403	924	352	1,580	483	-	-	-	-	-
Cash	-	500	500	500	500	500	500	500	500	500	500	500	500
<b>Less Current Liability</b>													
Current Portion of Notes Payable	-	9,544	9,309	10,450	10,484	11,511	13,379	12,960	13,195	13,957	14,764	15,620	16,527
Deferred Tax Liability	-	3,250	3,250	3,250	3,250	3,250	3,250	3,250	-	-	-	-	-
Accounts payable and accrued liabilities	-	-	-	-	-	-	-	-	767	1,066	1,480	1,993	2,592
	-	8,151	8,606	9,088	9,599	10,141	10,715	11,324	11,969	12,653	13,378	14,146	14,961
Total Current Liabilities	-	11,401	11,856	12,338	12,849	13,391	13,965	14,574	12,736	13,719	14,858	16,139	17,553



INVESTMENT OPPORTUNITY PROFILE: SWEET BISCUITS  
 BOOK FINANCIAL STATEMENTS  
 J\$0000 UNLESS INDICATED

	0	1	2	3	4	5	6	7	8	9	10	11	12
	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
<b>Net Assets</b>	<b>35,863</b>	<b>30,636</b>	<b>25,290</b>	<b>21,293</b>	<b>16,160</b>	<b>11,989</b>	<b>41,795</b>	<b>31,736</b>	<b>24,778</b>	<b>19,864</b>	<b>14,839</b>	<b>9,720</b>	<b>4,521</b>
<b>Financed By:</b>													
Senior Note Payable Less Current Portion	26,000	19,500	16,250	13,000	9,750	6,500	3,250	0	0	0	0	0	0
Initial Equity Investment	9,863	10,188	10,188	10,188	10,188	10,188	47,732	47,732	47,732	47,732	47,732	47,732	47,732
Accumulated Earnings	-	948	(1,148)	(1,895)	(3,778)	(4,699)	(9,187)	(15,996)	(22,954)	(27,868)	(32,893)	(38,012)	(43,211)
Total Partner's Capital	9,863	11,136	9,040	8,293	6,410	5,489	38,545	31,736	24,778	19,864	14,839	9,720	4,521
<b>Total</b>	<b>35,863</b>	<b>30,636</b>	<b>25,290</b>	<b>21,293</b>	<b>16,160</b>	<b>11,989</b>	<b>41,795</b>	<b>31,736</b>	<b>24,778</b>	<b>19,864</b>	<b>14,839</b>	<b>9,720</b>	<b>4,521</b>

Balance Check



## INVESTMENT OPPORTUNITY PROFILE: SWEET BISCUITS Return on Equity

	1	2	3	4	5	6	7	8	9	10	11	12	
Initial Investment	(9,863)	(325)	-	-	(37,544)	-	-	-	-	-	-	-	-
Equity Distribution (Contribution)	(4,616)	(5,870)	7,249	9,968	23,997	25,714	30,683	33,608	38,596	41,282	44,107	47,082	291,800
Net Cashflow	(9,863)	(4,941)	(5,870)	7,249	9,968	25,714	30,683	33,608	38,596	41,282	44,107	47,082	244,068
Pre-tax Cumulative Cashflow	(9,863)	(14,804)	(20,674)	(13,425)	(3,457)	(17,004)	8,710	39,393	73,001	111,597	152,879	196,986	244,068
Running IRR	0%	0%	0%	-41%	-6%	0%	9%	23%	30%	35%	37%	39%	40%
Running NPV @15%	(8,577)	(12,313)	(16,173)	(12,028)	(7,072)	(12,929)	(3,262)	6,769	16,322	25,862	34,736	42,980	50,632

Financial Result	
IRR	40%
NPV	\$50,632
	NPV @ 15%

## ANNEX B - SELECT LOAN OPTIONS

Institution	Loan	Interest Rate p.a.	Payback Period	Offer/ Conditions	Requirements
<b>EXIM Bank</b>	SME Growth Initiative	8.5%-11% on US\$ loans 10%-13% on J\$ loans.	Up to 4 years (with a 6-month moratorium on principal payments.		*Annual Sales cannot exceed J\$360M and business net worth should J\$1M or less. *Companies must be operating in Jamaica and be a part of the Productive Sector. Details: <a href="http://www.eximbankja.com/sites/default/files/resources/Documents/required.pdf">http://www.eximbankja.com/sites/default/files/resources/Documents/required.pdf</a>
<b>Development Bank of Jamaica (DBJ)</b>	Up to J\$100,000	10%	Up 8 years, with a 2 year moratorium	Energy Loans, 9% up J\$2M	*Get Approval from an AFI. *Submit a Business Plan, Financial Statements and Corporate Documentation.
<b>DBJ</b>	Minimum of J\$50M to maximum of J\$500M	10%	Public sector loans and large infrastructure projects have up to 15 years for repayment with moratoria on interest and/or principal payments of up to 5 years.	DBJ's commitment fees range between: 0.5% - 2% - Public Sector	*Where projects are co-financed or DBJ participates in a syndication the DBJ will lend a maximum of 65% of the project cost not financed by other financial institutions. * Stakeholder's equity must be no less than 30% of the total project cost.
			Private sector loan repayments are up to 7 years with moratoria on interest and/or principal payments for up 3 years.	1% - 2% - Private Sector. The size of the transaction and risk profile of the project will determine fees.	* DBJ will not accept sweat equity as part of a company's contribution to the cost of the project. * Stakeholder's equity must be no less than 30% of the total project cost. Details: <a href="http://dbankim.com/direct-loans">http://dbankim.com/direct-loans</a>
<b>National Commercial Bank (NCB)</b>	Access up to J\$30M	*12.7% to 14% for Energy Loans. *1.5% - 16% Otherwise. *Rates are negotiable.	6 months moratorium on Principal payments. 10 years to repay	For working capital, restructuring, capital expenditure of expanding your business.	Details: <a href="https://www.incb.com/business/sme/businessloans/requirements">https://www.incb.com/business/sme/businessloans/requirements</a>
<b>NCB</b>	Access up to J\$5M	*14% to 15%, with 2:1 ratio pledge. *19% to 20% otherwise. *Rates are negotiable.	Up to 36 months to repay for loans with a payment holiday feature available, if needed.	As an NCB business customer for at least 1 year, can access funds for short-term needs with no collateral required	Details: <a href="https://www.incb.com/business/sme/businessloans/requirements">https://www.incb.com/business/sme/businessloans/requirements</a>

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