SOYA FEED MEAL

**Coastal Food Processing Company Limited**

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PRODUCTION OF SOYA FEED MEAL FROM WET SOYA WASTE AS PROTEIN SUBSTITUTE FOR THE POULTRY, PIGGERY AND FISH FARMING INDUSTRIES

Table of Contents

[Table of Contents 1](#_Toc496797317)

[Executive Summary 3](#_Toc496797318)

[The Business 6](#_Toc496797319)

[The Animal Feed Industry 7](#_Toc496797320)

[Mission, Vision and Objectives 9](#_Toc496797321)

[The Company’s Products 11](#_Toc496797322)

[Production 11](#_Toc496797323)

[Marketing operations 12](#_Toc496797324)

[Management and Organisation 13](#_Toc496797325)

[FINANCIAL PLAN 14](#_Toc496797326)

[FINANCING THE PROJECT 15](#_Toc496797327)

# Executive Summary

Coastal Food Processing Company Limited was incorporated in the year 2013, has identified an opportunity in the processing of soya waste (okara) into soya bean powder which will serve as protein substitute for poultry, pigs and fish feeds. Soya bean protein is used in animal feed production, and is in high demand because of the high cost of imported fish meal. There is, however, very little local production and Coastal Food Processing projects that it can fit itself in this gap to serve the needs of poultry, pig, and fish farmers.

Coastal Food Processing is particularly motivated to pursue this opportunity because the raw materials required for its operations is the by-product generated by a local beverages company and, the company is assured of continuous supply.

**Mission**

The mission of Coastal Food Processing Company limited is to provide dried agricultural raw materials for the food and animal feed industries in Ghana, with the main focus on dried soya bean powder for the animal feed industries.

**Vision**

The vision of Coastal Food Processing Company limited is to become a reliable source of dried agricultural raw materials for the food and animal feed industries, noted for quality of products, and reliability in supply.

**The Company’s Products**

The main product that Coastal Food Processing Company Limited will produce is defatted soya bean powder for animal feed production. It is a dark brown powder with 44%-48% of protein, and 3-5 percent of fat by weight. It is packed in 50kg bags and is sold under the brand name SOYAFEED

The levels of protein and fat in the company’s product makes it particularly suitable feeds for chicks, piglets and fingerlings, which require higher levels of fat at the early stages of their development. The company has successfully developed and tested prototypes of its product, which has found acceptance among poultry farmers in Techiman, Kumasi, and Accra.

Coastal Processing will target poultry, pig, and fish farmers, Service feed mills and own feed mills in the Greater Accra, Ashanti and Brong Ahafo Regions of Ghana to sell its product

**The production facility**

The production facility is located on a one-acre (4plots) of land at Obregyima, The production plant will have an installed capacity of 11,000 x 50kg bags per year. The company projects to operate at 80% of installed capacity in year 1. The company’s equipment include centrifugal dewatering machine and gas-fired dryers to dry and process the raw materials into the final product

**Ownership and Management**

The company has a two-man Board of Directors will in the persons of Mr. I. K Osei Owusu and Mrs. Samuel Amponsah.

Mr.Osei-Owusu is a graduate of the University of Ghana, with a Bachelor of Arts in Political Science. His work experience spans the Banking, Real Estate and Small Business environments. Mr. Osei-Owusu is the sole proprietor of IKEG Enterprise, which is engaged in the production of cocoa powder. He is been in private business for over seventeen years.

Mr. Samuel Amponsah holds a Master of Science in Chemical Engineering from the University of Toronto, Canada. His work experience is in Real Estate and Hair Products manufacturing. He is been in private business for over fourteen years.

The Board would seek the advice of business experts to guide its decisions on the company

Mr. I. K Osei-Owusu will function as the Managing Director of the Company

Financial Projection & Funding

The company projects to achieve sales of Ghs 1,072,800, Ghs1,257,187.5 and Ghs1564500 respectively in the first 3 years of its operations, and achieve respective profits of Ghs162800, Ghs128,310 and Ghs 115,179.

Coastal Food Processing is seeking a 3-year loan of Ghs175,800 to finance asset purchases and a one-year loan of Ghs180,000 to finance its working capital requirement.

Coastal Food Processing projects to pay back the Assets finance loan in 3 years, with a 3-month moratorium, and the working capital financing loan in the first year of the plan. The payment Schedule is included in the cash flow statements attached to this document.

# The Business

Coastal Food Processing Company Limited was incorporated in the year 2013, with the cardinal objective to process and dry soya waste, generated from the production of soya milk, as a protein substitute in feeds for the poultry, piggery and fish farming industries. The directors of the company are Messrs I. K Osei -Owusu , and Samuel Amponsah Kyeremateng, who are also the shareholders of the company with holding 50% shareholding each.

The company’s decision to pursue the processing of soya waste into protein substitute was triggered when it learned that Healthilife Beverages, located on the Spintex Road, had started the production of soya milk, and that the waste from this production, which is high in protein was going to be discarded. Knowing that soya waste is processed in countries like Brazil for use in poultry feed, and knowing that much of the dry soya used Ghana is imported, with very little local production, the company saw an opportunity in exploiting the soya waste generated by Healthilife Beverages into useful products

The company started test run at Mile 7 Achimota facility. Due to nuisances smell coming out of the facility due to the dying of the soya product, the company decided to relocate the facility to Obregyima, along the Accra-Kumasi highway, in the Ayensuano Constituency of the Eastern, and commenced the construction of a factory shed to restart its operations. The shed is 70% complete, and the land is only half paid for.

The company needs funds to complete payment for its land, the factory shed which will house the dryer, and to secure a 20kva generator as a backup power supply.

This business plan is to guide the company in pursuit of this business opportunity, and to secure the funding required to begin its operations

# The Animal Feed Industry

The animal feed industry is made up of Commercial feed mills, Service feed mills and Owned feed mills

**Commercial feed mills** produce a standard mix of feed for sale at the mill gate, or through agents in depots scattered around the country. Ghana has about 15 commercial feed mills with a total installed operating capacity of about 1000 MT per day. However, because most buyers are small scale operators, most feed millers produce on 40-50% of their capacity.**4**

Most commercial feed mills are clustered around the capital, Accra, and Tema, with one each located in the Ashanti and Volta regions. The commercial feed sector is dominated by one large-scale producer, the Ghana Agro Food Company (GAFCO), located in Tema, which has the highest capacity at 200 tons/hour. Other commercial feed mills are Greater Accra Poultry Farmers Association, Agricare, Central Feed Mills, and Hirigifred Mills.4

**Service feed mills** accept feed ingredients from farmers and produce a customized feed mix. These typically serve small-scale poultry producers. These are located in the Ashanti, Brong Ahafo, and Western regions, and serve a small customer base, with about 10 to 15 customers per week. The capacity of service feed mills ranges from 1.5 tons/ hour to 3.5 tons/ hour, and the tonnage produced weekly is between 5 tons and 100 tons.

**Own feed mills** are mills which have been integrated into livestock production. These are increasingly becoming the norm in Ghana, especially in the major poultry-producing areas of the Ashanti and Brong Ahafo regions. These mills process primarily feed for livestock, which usually includes poultry, sheep, goats, and pigs. The capacity of the own farm feed mills ranged between 0.75 tons/hour to 20 tons/hour. These mills usually produce feed only when needed. Due to disease risks, integrated farms are reluctant to sell feed to other farms.

***The Soybean meal market***

This ingredient is vital in feed formulation. In Ghana about 70% of the Soybean, used by local feed producers is imported. The gap between local production of dry soya meal (locally known as Okara) and imported dry soya meal is about 70%. Soya bean cake is packed in 50kg bags and cost Ghs50 (USD15.38) in 2015, and Ghs100 (USD25.64 in 2016 and increase of 67% **2**

The major local suppliers of soybean meal are Ghana Nuts, tonnes located in Techiman which has an annual capacity of 60,000 4, and Vestor Oil, located in Kumasi. Imported soybean comes from Uruguay and from companies such as Intergrow, GAFCO, and Louis Dreyfus 1.

Ghana Nuts produces, “Poultry Master” which is a flour made by grinding the solid residue from soybean oil production. Poultry Master has a high protein level of 48% to 50%, and a low level of oil of less than 2%. It widely used as a filler and source of protein in animal diets including pigs, chicken, cattle, horse, sheep and fish feed **3**

There are indications that other companies and organisations are preparing to enter the soy bean cake market. It is reported Wienco Ghana limited, the largest maize producer in Ghana is working towards offering the whole package of poultry feed, and wants to be the largest player in the Ghanaian poultry feed market

Another organisation reported to be entering soya meal market is the World Initiative for Soy in Human Health which is reported to be embarking on a 5-year $15m, project dubbed Food for Progress, with the objectives to improve agricultural productivity and to expand trade of agricultural products. The project hopes to help the poultry sector to improve its competitiveness by improving feed conversion ratios and improve production. Part of this plan is to improve production of feed and its handling 4

**Competitors and Target Market**

The major direct competing brand which Coastal Processing is likely to deal with “Poultry Master” from Ghana Nuts. Poultry Master has high protein level of 48% to 50%, and a low level of oil of less than 2%, and is a well-known brand.

Coastal Processing will deal with this strong competitor by avoiding direct competition. While Poultry Master is targeted at commercial feed mills, Coastal Processing will target the farmers, Service feed mills and own feed mills in the Greater Accra, Ashanti and Brong Ahafo Regions of Ghana

**Market Opportunities and threats**

**Opportunities**

The animal feed market still depends on imported feed inputs. The current large gap between local production and imports, presents Coastal Processing a huge opportunity, as locally produced soya is likely to be readily available and less prone to price changes.

There are indications that the government is putting in place policies to support poultry, pig and fish farmers to boost production. This will surely increase the need for soya bean cake for feed production.

The World Initiative for Soy in Human Health project is likely to help farmers to boost soya bean production. This can increase the availability of Soya bean for processing into soya cake.

The environment is conducive for local soya bean production. That gives our company the opportunity to cultivate its own soya bean to serve as a constant source of raw material supply.

**Threats**

The World Initiative for Soy in Human Health project is the major threat the company anticipated. This is because that project seeks to work directly with farmers, and win their total commitment to the disadvantage of our company.

Large imports of poultry and other animal products could harm the local production, and dampen demand for soya bean cake.

**Strengths and Weaknesses**

Coastal Processing with exploit these opportunities and deal with the threat by drawing on its strengths and addressing its weaknesses

**Strengths**

***Close relationships***: the company has made strong contacts with farmers and farmers associations in its target market. The company will deepen these relationships into friendships which will make it difficult for competitors to shift business away from our company.

***Capacity to diversify***: the company’s dryer can be used to dry other agricultural produce like ginger, pepper, and other spices. If there is a down turn in demand for soya cake, the company can diversify into these other products to stay in business.

**Weaknesses**

The company will need to deal with the following weaknesses to enable it compete effectively in the market

***Raw material quality***: Poultry farmers require the soya cake with a high protein and low fat content. The raw material available to Coastal Processing is high in fat. The company must work on this raw material to reduce the fat to achieve the level of protein demanded by the market.

***Weak Finances***: The losses caused by the fire outbreak have weakened the finances of the company. The company will require financial support in the first few years for its operations

# Mission, Vision and Objectives

**Mission**

The mission of Coastal Food Processing Company limited is to provide dried agricultural raw materials for the food and animal feed industries in Ghana, with the main focus on dried soya bean powder for the animal feed industries.

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# The Company’s Products

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# Production

**The production facility**

The production facility is located on a one-acre (4plots) of land at Obregyima, near Nsawam, on the Accra-Kumasi highway. The facility houses a factory shed which 70% completed. When completed the shed will measure 55’ x 65’, and will have adequate space for both production and storage.

**Equipment**

The following equipment will be acquired and installed for the company’s operations

* An industrial drying machine with accessories (1 set)
* Centrifuge de-watering machine (1 pcs)
* 52kg Gas cylinders (2pcs)
* 1000kg gas cylinder (1)
* 20kva generator as power back-up
* Kia truck (1)

**Production capacity**

The production plant will have an installed capacity to process about 2000 metric tonnes of wet soya bean mash per year, which will translate into about 554 tonnes of dried soya bean power or 11,000 x 50kg bags per year. The company projects to operate at 80% of installed capacity, and thus projects to produce about 8900x50kg bags per year

**Raw materials**

The raw material for the company’s operations will be sourced from Healthilife Beverages, located on the Spintex Road in Accra. The raw material is wet soya bean mash (Okara) which is the residue generated from the production of soya milk by of Healthilife. Coastal Food Processing has a memorandum of understanding with Healthilife to be the sole recipient of this soya mash. The raw material will be transported in trucks to the factory premised for processing. Coastal Food Processing is assured of about 10 metric tonnes of soya mash per day annually.

**The Production Process**

The process of producing the company’s dry soya bean powder is illustrated below:

# Marketing operations

**Sales Targets**

The company projects to sell Ghs 89,400 per month. This will bring its annual sales to Ghs1, 072,800.00

The company will employ the following marketing strategies to ensure that it achieves its targets in its demand-driven markets.

* Focus marketing activities on poultry, pig, and fish farmers in the Greater Accra, Ashanti and Brong Ahafo, as the target market for the company
* inform itself of the needs of its customers at least a month ahead of schedule production, to ensure that goods produced are immediately supplied to customers
* engage in direct distribution of its products to target customers
* provide samples of its produce to target customers, and follow up closely to make sales.
* maintain close contacts with customers, to handle their complaints and address their questions
* educate farmers on the unique suitability of its soya powder brand for chicks, piglets and fingerlings to get farmers to adopt its product
* introduce another version of its soya powder with protein content to 50% to meet the needs of the farmers
* The company does not intend to engage in advertising, but will seek opportunities to collaborate with farmers in their activities in order to secure brand loyalty
* Engage with the Technical Officers of the Animal Husbandry Division of the Ministry of Agriculture to facilitate the dissemination of product information to farmers

# Management and Organisation

The company will adopt structure illustrated below

BOARD OF DIRECTORS

MANAGING DIRECTOR

PRODUCTION SUPERVISOR

MARKETING OFFICER

ACCOUNTS & ADMIN OFFICER

PRODUCTION STAFF (6)

The Company will have a 3-member Board of Directors. The members are:

Mr. I. K Osei Owusu, Shareholder/ member

Mr. Samuel Amponsah., Shareholder/member

Mr. Moses Owusu Achiaw, Chairman

Mr. Osei-Owusu is a graduate of the University of Ghana, with a Bachelor of Arts in Political Science. His work experience spans the Banking, Real Estate and Small Business environments. Mr. Osei-Owusu is the sole proprietor of IKEG Enterprise, which is engaged in the production of cocoa powder.

Mr. Samuel Amponsah holds a Master of Science in Chemical Engineering from the University of Toronto, Canada. His work experience is in Real Estate and Hair Products manufacturing

Mr. Owusu Achiaw is a Chartered Accountant with many years’ working experience. He is currently a Partner of Dehans, a Chartered Accounting Firm in Accra.

The Board would seek the advice of business experts to guide its decisions on the company

Mr. I. K Osei-Owusu will function as the Managing Director of the Company

# FINANCIAL PLAN

**Projected revenues**

The company’s revenue is projected to grow from Ghs1,072, 800 in the first year of the plan to Ghs 1,564,500 in year 3 of the plan. The table below gives the detailed projections

|  |  |  |  |
| --- | --- | --- | --- |
| PROJECTED REVENUES FOR 3 YEAR-PERIOD | | | |
| Sales Revenue | **YEAR 1** | **YEAR 2** | **YEAR 3** |
|  | 1,072,800 | 1257187.5 | 1564500 |

**Projected Profits**

|  |  |  |  |
| --- | --- | --- | --- |
|  | **YEAR 1** | **YEAR 2** | **YEAR 3** |
|  | Ghs | Ghs | Ghs |
| Gross profit | 525,672 | 515,447 | 516,285 |
| Total expenses | 362,872 | 377237 | 401,106 |
| Profit before tax | 162,800 | 138,210 | 115,179 |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | YEAR 1 | YEAR 2 | YEAR 3 | YEAR 4 | YEAR 5 |
|  | US$ | US$ | US$ | US$ | US$ |
|  |  |  |  |  |  |
| Gross Profit | 264,297.58 | 536,498.26 | 780,252.79 | 1,130,409.00 | 1,681,679.18 |
| Profit after Tax | 63,075.33 | 247,498.48 | 372,557.05 | 523,020.05 | 833,301.34 |
| Assumed exchange rates GHC / US$ | 3.5 | | | | |

The downturn in profits is due to the fact that costs are projected to increase during the plan period, while prices for our products have been projected to increase marginally.

# FINANCING THE PROJECT

Coastal Food Processing is seeking a 3-year loan of Ghs175,800 to finance asset purchases and a one-year loan of Ghs180,000 to finance its working capital requirement

The capital raised will be employed as shown below:

|  |  |  |
| --- | --- | --- |
| **COASTAL FOOD PROCESSING COMPANY** | | |
| **FUNDING REQUIRED** | |  |
|  |  |  |
|  |  |  |
| Description | Amount(Ghs) |  |
| Assets |  |  |
| Land | 20,000 |  |
| Truck | 60,000 |  |
| Installation & fixtures | 45,800 |  |
| Factory shed | 30,000 |  |
| Wiring & plumbing (labour) | 20,000 |  |
| Total for Assets | **175,800** |  |
| Working capital | 180,000 |  |
| **Total Funding required** | **355,800** |  |
|  |  |  |

**Payment of Loan**

Coastal Food Processing projects to pay back the Assets finance loan in 3 years with a 3-months moratorium, and the working capital financing loan in the first year of the plan. The payment Schedule is shown in the cash flow statements attached to this document.

*References*

*1.Kwaw S Andam; Michael E Johnson; Catherine Ragasa; Doreen S Kufoalor; Sunipa Das Gupta: A chicken and Maize situation: The Poultry Feed Sector in Ghana; IFPRI Discussion Paper 01601 January 2017*

*2.Elmasoeur, Ashitey; Ryan Scot 2017 Ghana Poultry Report Annual May 23 2017. GAIN Report, USDA Foreign Agricultural Service*

*3. www.ghananuts,org*

*4.Analysis Poultry Sector Ghana; An inquiry of opportunities and challenges; pg. 8 Embassy of the Kingdom of the Netherlands.* [*www.rvo.nl*](http://www.rvo.nl)

5. [*www.feednavigator.com*](http://www.feednavigator.com)