

BUSH COMPANY



Executive Summary

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NEW- DIMS Affordable Nutritious Food
Processing for Africa

E. Douglas Shadd



THE BUSH COMPANY NEW-DIMS PROJECT

Company Overview

The Bush Company & Associates (BushCo) has twenty years of entrepreneurial management and business development expertise with specific applications in the food industry, i.e., food service management, marketing, processing, packaging, and distribution of various foodstuffs. BushCo's founder has participated in virtually every segment of the US food industry:

- Owned and/or operated fast food facilities, theme restaurants, large banquet facilities;
- Managed and supplied contract-based, cyclical food products to schools, correctional institutions and healthcare facilities; facilitated the processing of USDA commodities to economically supply wholesome school lunch menus; and
- Provided consultant services to numerous food manufacturers and distributors relative to product development and marketing.

BushCo's comprehensive involvement within the food industry reflects a unique understanding of the delicate balance between nutrition, economics, and culture. Its design products and production systems accommodate nutrition, market conditions, preferences, demand, and budgets. The BushCo mission is to provide management know-how, technology and energies as "weapons of war" against hunger, starvation and malnutrition in developing countries in Sub Sahara Africa.

Project Objective

The long-term objective of this proposal is to improve nutritional health within various African regions through the introduction of affordable new innovative products by establishing a/several multipurpose food and beverage processing and packaging facility/(ies) on the continent of Africa. Initial BushCo observations and research has focused on two preferential trade areas (PTAs):

- Ghana as a member of the Economic Community of West African States (ECOWAS), and
- Uganda as a member of the Common Market of Eastern and Southern Africa (COMESA).

Nonetheless, BushCo remains flexible and seeks to locate where the development environment is conducive to growth. To that end, the availability of appropriate infrastructure, government incentives, natural resources, trainable labor, development sophistication, and accessible language, investor preferences, and commerce and banking facilities will ultimately influence the initial site selection decision.

Project Summary

BushCo proposes a new-start, for-profit business with a central production unit operating in Sub-Saharan Africa. This food processing and packaging facility will specialize in blending solids with liquid additions for nutritional fortification and flavor enhancement. Packaging considerations include flexible pouch packaging using materials such as paper, foil, poly, and composites. Advanced packaging techniques will be employed that ensure long-term shelf life. The plant configuration will include a powdered food processor, flexible pouch packer and extensive product R & D Laboratory capability. To that end BushCo will be in the position to develop, process and package a large variety of products; Initially targeting whey, cocoa, vegetable oils, vitamins and minerals, tomato powder and powdered cereals (corn, wheat, oats, and flours) and rice. From these initial ingredients, BushCo will produce a variety of products consisting of NEW-DIMS® Whey-based low lactose milk alternative, Tomato Paste Powder, and Fortified Powdered Cereals and Rice.

These selected products have an extremely high demand and are traditional foods that will be nutritionally fortified. Many of raw materials will be locally sourced; the final value-added products will be able to compete with domestic and imported brands.

Moreover, they will be expected to create regional demand because of their superior quality, affordable pricing and innovative applications. Two distinctive markets are considered primary markets; the feeding relief market (contract sales) and general domestic markets.

The proposed manufacturing and processing facility will be 77,000 square feet, with an annual production and packaging capacity of 21,000 tons of powdered milk-like substance. The facility will be designated a Free Port Zone and be located where two additional industrial lots are available for expansion purposes. Any one product could drive the development of an entire plant, or dominate the production mix of our proposed plant. However, BushCo proposes to maximize its investment by initially producing a limited variety of products, thereby stimulating a diversity of future growth opportunities.

Market Summary

Milk. The ECOWAS demand for milk, milk powders and alternative milk products – conservatively based on 20% to 30% market participation by customers who both need and can afford the product – is estimated to be between \$1.8 and \$2.6 billion, per annum.¹

Given a most optimistic estimate of 50% supply fulfillment by competitors, donors and other local suppliers; a supply shortfall of \$900 million to \$1.3 billion results. At full capacity in the processing and pouching configuration BushCo could only supply 10% of that shortfall (or \$88M); at full capacity with the addition of bulk production and franchise development, 15% of the shortfall (or \$133 million) could be supplied.

Tomato. The ECOWAS region annually consumes in excess of \$200 million of imported canned tomato paste. Tomato paste is used to make soups, sauces, and stews - main dishes in the African diet. Because canned tomato paste is 50% to 60% water, a 20-pound case of tomato paste yields 20 pounds of paste that can then be reconstituted per the water requirements of the recipe. A 20-pound case of tomato powder, once reconstituted yields 60 pounds of tomato paste. All other things being equal, the weight advantage alone will pull sales through the distribution channel. At full capacity BushCo could satisfy 40% of the estimated demand for tomato paste within the ECOWAS region.

Cereal. In the ECOWAS region, it is estimated that cereals, including rice and wheat provide 45% of the caloric intake of the average African adult.² The projected 2006 World Food Program (WFP) aid requirement for Sub-Saharan Africa totals 2,661,101 tons for the commodity group that includes cereals, oil, pulses, etc; with the preferential trade areas accounting for the following distributed amounts:

- ECOWAS (West Africa) 312,222 tons
- SADC (Southern Africa) 626,049 tons
- East and Central Africa 1,025,344 tons

The BushCo intent is to capture market share by strategically making locally demanded value-added inputs such as fortification and flavor enhancements, shelf stabilization and unitized packaging of traditional foods.

Strategic Market Position

Based on WFP's projected food need for Sub-Saharan Africa BushCo's production capacity would be less than ½ % of the commercial imports volume and less than 1% of all Food Aid imports.³ Our competitive advantage is that we can produce highly nutritious products that are affordable. We can compete in the general market, informal market and food relief markets.

¹ Assuming ECOWAS population of 200 million, wherein 20% to 30% consume milk = 60 million users @ one glass of milk per day x cost .12 cents per glass x 365 days = 1.8 to 2.6-billion-dollar potential. Assuming existing supply fulfillment of 50% = supply short fall of \$900 million to \$1.3 billion.

² UN/Africa Recovery Oct. 1997

³ WFP 2006 Projected Needs for Projects and Operations

Simply stated, BushCo believes that nutritious quality products that are also convenient and affordable offer a winning solution to those organizations responsible for meeting emergency food requirements. This advantage results from location, product design, ingredient quality, production flexibility and economies of scale realized because of the prudent use of advanced technology, strategic alliances with major suppliers and management know-how. Given these advantages as well as the tremendous demand for nutritious affordable food in Africa, full capacity should very easily be achieved in a very short period.

Marketing

BushCo proposes to develop and implement an aggressive advertising and promotion program. The effort will be informative, educational, newsworthy, entertaining and effective. The plan is to introduce both our facility and staff into the region as a resource that can be made available to governments, schools, PVOs, and NGOs. A variety of outreach media will be utilized – web and non-web based to connect with prospective customers and key decision makers. The company will sponsor, host and/or conduct training seminars and distance-learning programs with local institutions of higher learning. In all outreach programming, the content will be Nutrition!

MANAGEMENT

Mr. E. Douglas Shadd, principal developer of the Bush Company & Associates (T/A) will direct this project. He is an MBA with more than thirty years of entrepreneurial management and business development expertise. He has managed a diverse range of business activity in both domestic and international markets. As such, he can provide fresh ideas, innovative approaches and creative management and business development solutions. His 24-year entrepreneurial history includes considerable business development experience with specific expertise in the Food Industry. As well, he holds a Culinary Arts Diploma, Journeyman Chef standing, and Associates of Sciences Degree in Food Service Administration and BS Degree in Hotel Administration & Business Administration.

Twenty-four years of entrepreneurial experience results from his status as owner/operator of several businesses, including a brokerage firm, business development group and management consulting firm. He has cross-sector experience in a variety of industries: food service, agribusiness, entertainment, international business development and management, natural resource development, financial management and control, construction management, government contracting and information technology. His international experience is specifically in the areas of project development and management relative to natural resources and agribusiness development. His mainstream corporate exposure includes employment with ITT Morton Frozen Foods (School Lunch Division) and Kellogg's Foodservice, Boon Young & Associates.

Specifically, he has:

- Conducted ten years of research concerning affordable nutrition and feeding solutions for Africa. Collaborated on product development, plant design and structured the financial perspective on New -Dims
- established a food brokerage and consultant company that generated more than \$11millions of successful competitive bids to support school lunch, prison feeding and hospitality food service programs;
- designed and managed a national rebate tracking and collection system for (Choice Hotel) one of the largest hotel chains in the country that tracked sales and distribution of food products manufactured by more than 24 leading US manufacturers; and
- provided consultant services to various food manufacturers, processors and distributors.
- facilitated the development plans and project buy out for a spice processing facility in Ghana WA \$2M plus budget.

The associate management team has 100+ years of expertise in manufacturing, product development, marketing and business management. A permanent management team will be recruited from the manufacturing industry and international business development community. We are committed to becoming a major Agribusiness Development Force within Sub-Saharan Africa. Strategic alliances with key suppliers; institutions and African-based resources combined with our corporate know-how will equal a winning formula.

Development & Growth Strategy

A key component to the growth strategy is to build parallel operations in other countries under a franchise arrangement. Franchise unit capability includes product packaging, marketing, warehousing, distribution and lab services. They receive processed bulk product from the initial plant and do very little if any processing.

DEVELOPMENT STRATEGY PHASES

Phase 1: The first phase is separated into two sections i.e., Business Plan Refinement inclusive of resource gathering, partnering, project commitment in terms of funding and potential contracts; (8 months) The latter section will focus on Project Implementation – plant build out (18 months) i.e., the establishment of a local production facility in Africa that will be self-contained that enables product processing, packaging marketing and distribution. Thus, the first two years concludes the development phase wherein our capability is established.

Phase 2: The second phase (third and fourth program years) mark the first and second years of production. Wherein we project to operate two shifts based on a 230-day year. Average projected profit \$4.4 million per year. That configuration represents two thirds capacity.

Phase 3: The third production year projects three shifts of what we refer to as regular pouch business with the addition of Bulk Drum Production at two shifts. Regular pouch business entails processing / blending and pouching. Wherein Bulk Drum production is produced for satellite / franchise packaging facilities located in other countries. Under that configuration profit is projected at \$ 16M.

The fourth production year projects three shifts for both regular pouch business and bulk drum production. Under that configuration profit is projected at \$ 19M. It is assumed that all production improvements are internally financed.

Phase 4: This phase marks the fifth production year wherein an additional bulk drum production line is added. All lines operating on three shifts results in an income projection of \$28M

DEVELOPMENT TASK

PHASE #1 Codify & Conclude Business Development Activity - \$11.4 Million

A) Business Development / Project Startup: Fine-tune the development approach set forth in the Master Business Development Proposal; Finalize product formulation, pricing and packaging; Attract public and private sector resources; Finalize host country government and private sector support; Produce a Turnkey proposal setting forth the Custom Design, Construction and Facilities Management and Operations of the initial plant.

Resources - Task Time: 8 months; Investment: BDE \$ 800,000 & Organization Costs \$406,679

B) Development of Production Facility: Site development; Construction of Facility and Corporate Housing; Equipment purchased and installed; Senior Management staffing and training; Implement advanced promotions; Organize a near term income producing activity such as lab services; Operations staffing and training; Marketing, sales and advertising; Production Inventory, testing and ramp-up; Product distribution. Resources -Task time: 24 months; Investment \$10.2 million.

PHASE #2: First and Second productions years - Working capital \$4.4 million

A) Two Shifts of regular pouch business: Blending and pouching of all production, product distribution. Facilitate the development of satellite / franchise packaging facility outlets.

PHASE #3: Third & Fourth production years - Increase production capacity: Increase regular pouch production to three shifts; Add Zigzag and Twin Shell blenders; and other supporting equipment to existing facility for bulk drum production; Increases blending capacity 50%; Investment - \$1.4 million internal investment

PHASE #4: Fifth production year- Increase production capacity by adding blending room addition complete with blenders onto existing plant; Run three shifts regular pouch business, two shifts two bulk drum production lines. Investment - \$2 million internal investment.

SUMMARY:

Phase #1 Establish Initial Plant	24 Months	Investment \$11.4M
Phase #2 Regular Pouch Business	24 Months	Investment \$ 4.0M
Phase #3 Franchise Development	Market driven	Investment \$1.4M (internal)
Phase #4 Franchise Development	Market driven	Investment \$2M (internal)

FINANCIAL OVERVIEW:

The funding model assumes \$7M equity funding, \$4.6M debt funding, and \$4.14M Line of Credit associated with sales contracts. The uses of those funds are viewed as \$800mm Business Development Exp., \$10.2M Capital Expenditures, \$4.36M Working Capital and \$4mm Closing and Organization costs. Source \$15.7M Use \$15.7M

Plant modeling and income projections are based on the production of NEW-DIMS our whey base milk alternative. Comprehensive product development and costing has been concluded. Current unit price .15 cents per reconstituted 8 oz glass.

Our projections indicate that the debt funding at 10% interest can be repaid by the end of the fourth year (with or without franchise development). Equity investors can recoup their investment within six years assuming satellite / franchise development.

Selected Performance Ratios:

Investment \$15.7M	1yr	2yr	3yr	4yr	5yr	6yr	7yr
Retained Earn	(000,000)	(\$323,778)	\$4,901.	\$8,911.	\$25,888.	\$45,850.	\$74,008.
Net Profit/Net Sales			7%	6%	10%	10%	11%
ROI on Net Worth (Total Assets)			21%	16%	37%	27%	27%
Cumulative Investment ROI/Net Worth (N/W)			30%	32%	74%	109%	151%
Profit On Investment			41%	25%	52%	38%	35%
Tangible N/W			\$11,901	\$15,911.	\$32,886.	\$52,850.	\$81,008

GENERAL DESCRIPTION: NEW-DIMS, is a nutritional whey based milk alternative. It is low in cholesterol, calories, fats, and sodium. It has a low lactose content, high content of both simple and complex carbohydrates. In its powdered form the product is shelf stable for twelve months (sealed), and when reconstituted with water and refrigerated it will last 10 days. The product has a great flavor and can be reconstituted to make a milk substitute for **whole milk, 2% milk, or concentrated milk**, by adjusting the water to mix ratio.

Reduced lactose whey, maltodextrin, nonfat dry milk, soybean oil, whey protein concentrate, calcium caseinate, fructose, food starch modified, natural milk flavoring with other natural flavors, titanium dioxide, lecithin, carrageenan, xanthin gum, polysorbate 60, polysorbate 80, magnesium oxide, vitamin E (tocopherol acetate), iron (ferric phosphate) , vitamin A palmitate, niacinamide, zinc oxide, D-calcium pantothenate, vitamin K1 (phytonadione), vitamin B12 (cyanocobalamin), vitamin D3, copper gluconate, vitamin B6, (pyridoxine hydrochloride), vitamin B2 (riboflavin) , vitamin B1 (thiamine mononitrate), folacin (folic acid), biotin, potassium iodide, mixed tocopherols added to protect flavor.

NUTRITION FACTS

Serving Size 17 g	Vitamin A 20%	Vitamin C 20%																																
Amount Per Serving	Calcium 10%	Iron 20%																																
Calories 70 Calories from Fat 20	Vitamin E 20%	Thiamin 25%																																
% of Daily Value*	Riboflavin 30%	Niacin 20%																																
Total Fat 2g 3%	Vitamin B6 20%	Folate 25%																																
Saturated Fat 0g 0%	Vitamin B12 25%	Biotin 20%																																
Stearic Acid 0g	Pantothenic Acid 30%	Phosphorus 20%																																
Polyunsaturated 0.5g	Iodine 20%	Magnesium 20%																																
Monounsaturated 1g	Zinc 20%	Copper 20%																																
Cholesterol 0mg 0%	* Percent Daily Values are based on a 2,000 calorie diet. Your daily values may be higher or lower based on your calorie needs: <table border="1"> <thead> <tr> <th></th> <th>Calories</th> <th>2,000</th> <th>2,500</th> </tr> </thead> <tbody> <tr> <td>Total Fat</td> <td>Less than</td> <td>65g</td> <td>80g</td> </tr> <tr> <td>Sat. Fat</td> <td>Less than</td> <td>20g</td> <td>25g</td> </tr> <tr> <td>Cholesterol</td> <td>Less than</td> <td>300mg</td> <td>300mg</td> </tr> <tr> <td>Sodium</td> <td>Less than</td> <td>2,400mg</td> <td>2,400mg</td> </tr> <tr> <td>Potassium</td> <td>Less than</td> <td>3,500mg</td> <td>3,500mg</td> </tr> <tr> <td>Total carbohydrate</td> <td></td> <td>300g</td> <td>375g</td> </tr> <tr> <td>Dietary Fiber</td> <td></td> <td>25g</td> <td>30g</td> </tr> </tbody> </table>			Calories	2,000	2,500	Total Fat	Less than	65g	80g	Sat. Fat	Less than	20g	25g	Cholesterol	Less than	300mg	300mg	Sodium	Less than	2,400mg	2,400mg	Potassium	Less than	3,500mg	3,500mg	Total carbohydrate		300g	375g	Dietary Fiber		25g	30g
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Sugars 6g																																		
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Other Carbohydrates 2g																																		
Protein 4g	Calories per gram: Fat 9 / Carbohydrates 4 / Protein 4																																	