**Name Brownson Deborah Paul**

**Department: Nursing science**

**Matric number: 18/mhs02/056**

**Course title: Food and health awareness**

**Course code: Afe 202**

**A BUSINESS PLAN FOR THE DEVELOPMENT OF A FOUR HUNDRED HECTARES TOMATO PLANTATION AND ESTABLISHMENT OF 20 TONNES PER DAY CAPACITY TOMATO PLANTATION AT BROWNSON FARM,  JOS, PLATEAU STATE, NIGERIA BY BROWNSON AGRIBUSINESS VENTURES AND CONSULTANCY**

**The Opportunity**

A well-located, commercial tomato processing operation focused on continuous production rather than absorbing seasonal harvest gluts can increase incomes over five times for participating smallholder farmers, who comprise 75% of Nigeria’s workforce. The Nigerian Federal Ministry of Agriculture and Rural Development has made a commitment to improve farm-to-processor links in the tomato value chain, but no business has yet developed a viable, sustainable model to competitively aggregate, process, package and sell tomato paste domestically. Our model links farmers directly to paste production, simultaneously reducing poverty for small holder farmers, who are among the country’s most vulnerable population, and decreasing Nigeria’s dependence on an imported food product that is a dietary staple in Nigerian cuisine.

**Mission**

Tomato Jos is an agricultural production company that believes in the power of farming and processing local food products for local consumption. Our mission is to make tomato production a sustainable, profitable business for

Nigerian farmers.

**Value proposition**

Value to farmers: we give farmers the tools and the incentive to sell a greater proportion of an increased tomato yield at a consistent, fair price. Value to consumers: we provide consumers with access to domestic tomato paste that matches the quality of imported products at a lower cost.

**Theory of change**

If we can connect Nigerian farmers to domestic consumers of processed tomato products, we will improve the lives and incomes of smallholder farmers, provide more non-farming job opportunities for the increasingly urban population, and increase the stability and sustainability of the food supply in Nigeria.

**The Problem**

Nigeria is simultaneously the world’s 13th largest tomato producer and the world’s largest importer of tomato paste. Although approximately 200,000 Nigerian farmers grow over 1.5 million metric tonnes of tomatoes every year, half of their harvest is lost before reaching the market, and the remaining 50% is subject to significant downward pressure on price due to common gluts in the markets and the perishable nature of the crop. Farmers, who are among Nigeria’s most financially vulnerable population, bear the burden of both these post-harvest losses and this price uncertainty. Smallholder tomato farmers lack access to a consistent, large market for their produce, rendering them unable to consistently make a profit and dis-incentivized to increase their yields or change their farming practices. As a result, domestic supply cannot meet local demand for fresh tomatoes, which exceeds 2 million metric tonnes or $2.5 billion annually. The country supplements local demand for fresh tomatoes with $360 million (over 300,000 metric tonnes) of imported tomato paste annually.

Nigeria is the most populous country in Africa and the seventh most populous in the world – its population is expected to grow from 170 million today to over 440 million by 2050. This has grave implications for the country’s food security situation, given that it is heavily dependent on food imports. If global food prices were to spike and drive up the price of imports, as they did in 2007-2008, Nigeria would struggle to feed its population.

**Solution**

Substantially improving the livelihood of smallholder tomato farmers requires moving multiple metrics simultaneously. Farmers must be able to sell more of their product, by increasing yields and reducing post-harvest losses; they must be able to capture a greater amount of the value of their harvest; and they must be less vulnerable to seasonal price fluctuations. To make this possible, Tomato Jos embeds farmers’ production within a supportive, self-contained agribusiness ecosystem focused on local production, processing, distribution, and farming practice improvement.

At scale, Tomato Jos will operate three business lines: (1) Farm and agricultural center with farmer education and bundled inputs to help smallholder farmers grow and harvest crops more efficiently;; (2) Logistics and supply chain support to navigate the “last mile” to smallholder farms and safely bring produce to the processing facility; and (3) Food processing and packaging facility that prepares finished goods for distribution in Nigeria.

As the business attains profitability, Tomato Jos will consider options to reinvest a portion of profits into expanded agricultural support programs for farmers in the surrounding community. Through investment in the community, we hope to further align farmer outcomes with the success of our venture and improve the lives of smallholder farmers and the competitive landscape for local agriculture, translating into future returns for the business.

**Social Return on Investment**

Tomato Jos will have a large positive impact on Nigeria’s agribusiness sector, the social fabric, and overall economy by ultimately achieving the following:

● Increase revenues from tomato sales five times for participating smallholder farmers

by year five.

● Create a demonstration farm that actively spreads agricultural best practices to the

surrounding community.

● Provide a consistent market for approximately 1,000 farmers within our network by

year five.

● Link farmers to markets and strengthen value chains through logistics systems that are able to navigate the “last mile” to smallholder farms.

● Improve access to the appropriate quantities of fair-priced inputs such as fertilizers and high-yielding seeds through bundling and pooled procurement.

● Reduce financial risk from volatile crop prices by offering forward purchasing agreements.

**Financials**

Tomato Jos follows a low margin, high volume base of the pyramid model where profit is driven by both scale and technological innovation to control costs. We project that Tomato Jos will become profitable within three years of launch following investment focused on expanding the farmer network, our nucleus farm and expanding tomato paste processing capacity. Over this period we anticipate that Tomato Jos will undergo two key capital raises: a $500,000 in seed equity in the first quarter of year two to fund our Nigerian nucleus farm expansion, launch the Dami system and begin processing tomato paste. Following the successful scale-up a $3,000,000 growth equity subscription in quarter one of year four is required to fund expansion of the business model. Once Tomato Jos reaches scale we believe that profit margins will approach 15%.

Introduction

“Tomatoes are my livelihood, it's what I know," says Azumi Kutumbi, looking across his hectare of tomatoes, "but it's a very tough business.” Kutumbi has been farming tomatoes in the verdant rolling hills near Jos in Nigeria for 15 years. The proceeds from the back-breaking work have allowed him to support his family and put his four daughters through school. But hard toil is not always rewarded with hard profit.

"Nothing is certain", he says. "We've had some very bad seasons, and with tomatoes, there are difficulties all along the process."

In Nigeria many farmers complain of having to borrow at 100% interest rates from local lenders to buy seeds and fertiliser. And once the tomatoes have been harvested, local producers have limited access to consumers in cities such as Lagos and Abuja. Furthermore, with labour and raw inputs scarce, mechanisation often

limited and weather patterns increasingly unpredictable, small-scale farmers like Kutumbi can struggle just to break even.

Tomato Jos wants to change the lives of smallholder farmers like Kutumbi by improving access to education around best practices, increasing access to high-quality inputs, and enabling access to end consumers. Farmers selected to work with Tomato Jos receive seeds, fertiliser and other resources on interest-free credit. They are trained by agronomy managers who help monitor the progress of their tomato field and Tomato Jos buys their produce at market price, thereby securing tomatoes for its processing plant.

Farmers like Kutumbi previously yielded 7 metrics tonnes of Tomatoes per hectare that could sell for around $1000 at the local market. Now farmers utilizing the Tomato Jos model can increase their yield to 26 metric tonnes per hectare reaping more than $5000 from selling to Tomato Jos for tomato paste processing.

“This is still a new thing," says Kutumbi cautiously, "I hope it will work because if it does, it will help me, my family, and our community. Things could be much better than before," he continues, "and maybe if my children see farming can be profitable, they will even want to stay and be farmers too!"

Marketing Paste in Domestic Channels

Tomato Jos will secure an end market for our local brand of tomato paste. Our approach will be two-pronged: first we will ensure the offtake of our packaged output to large retail centers, and second our traditional marketing efforts will drive consumer purchases of our unique product.

1. Get Tomato Jos products on shelves. Initially, we plan to sell Tomato Jos products to both large supermarket chains and traditional open air markets. The two largest supermarket chains in Nigeria are Shoprite and SPAR, which is the world’s largest food retailer. Both Shoprite and SPAR are large enough that they contract and purchase local food products directly from local manufactures without going through a distributor. Tomato Jos will use its fleet of trucks to deliver products directly to the supermarkets, thereby preserving margin for us and the supermarkets.

While we expect that our initial placement with these supermarkets will be on a trial basis, once we demonstrate consumer demand, we intend to secure long-term, year- round delivery contracts with each of these chains for each of their 16 locations throughout the country (as of 2013).

Despite any success that we have with Shoprite and SPAR, we plan to diversify our distribution channels to traditional open air markets because only 5% of food in Nigeria is retailed through supermarkets. Tomato Jos’ fleet will transport our product to centralized, large open air market distributors based in Abuja and Lagos. From there, these distributors will ensure that our product makes it to the largest open air markets in the largest cities in the country. While the price for fresh vegetables fluctuate in the open air markets, the price for our product and other packaged goods in the market remain fixed. The largest driver of costs to be successful in placing our product on retail shelves will be the transportation costs, namely the diesel, required to truck our product to the various supermarket chain outlets.

Our current product (70g sachets of tomato paste) is the most commonly purchased size of tomato paste in Nigeria’s retail market. However, over time, we plan to extend our distribution model into the food services industry, supplying larger drums of tomato paste to the food services market (i.e. restaurants and hotels).

2. Drive consumer purchases. We will drive consumer purchase by promoting a brand that is high quality and uniquely Nigerian. Our branding strategy will be to target the lower-, middle-, and upper-income market segments as they all purchase and use tomato paste for everyday meals.

Tomato Jos will rely on very frequent traditional marketing methods, such as radio advertisements, billboards, and taste tests on-site in supermarkets to drive first time trial of our product. We also plan to get state and federal level government endorsement of our product as a product that is 100% made and packaged in Nigeria. We will encourage repeat trial of the product by linking purchase of the product directly to the farmers in our program via advertisements and social media.

A. LandClearing

ACTIVITY

Land clearing Cross cutting Rome ploughing Spraying herbicide

Sub total Total

B. Equipment

QTY

1 Hectare 1 Hectare 1 Hectare 1 Hectare

1 Hectare 500 Hectares

AMOUNT K 250,000 00 20,000 00 65,000 00 15,000 00

350,000 00 175,000,000 00

MODEL USD YTO-904 25,000 A kinze 2200 5,000

27D-R7 10,000 4GT-7 100,000

3W-1000L-18 7,000

147,000 53,655,000 00

NAME Tractor Maize planter

Tripper Combine Harvester Boom Sprayer Sub Total

C. Vehicle

TYPE

Pick-up truck

D. Irrigation

TYPE Hose Reel

QUANTITTY 1

1

NAIRA K 9,125,000 00 1,825,00 00

3,650,00 00 36,500,00 00

1 1

1

2,555,000 00

QUANTITY MODEL

AMOUNT HILUX 45,000,000

MODEL AMOUNT 45-800YT 1,500,000

3

QUANTITY 1

OPERATING COST

WORKING CAPITAL Ploughing/Ha

500 Hectares Mechanization and Storage 500 Hectares

Interest/Ha

500 Hectares

Total cost/Ha

500 Hectares

Loan and Interest cost/Ha 500 Hectares

Irrigation cost/Ha 500 Hectares

AMORTIZATION

ACTIVITY

Land clearing amortization/Ha Land clearing amortization/500 Ha

REVENUE

PRODUCTION CYCLE

Revenue/Ha

500 Hectares

Net revenue for 500 hectares without amortization

Net revenue for 500 hectares with amortization

AMOUNT K 20,000 00 10,000,000 00 95,000 00 47,500,000 00 15,000 00 7,500,000 00 250,000 00 125,000,000 00 215,000 00 107,500,000 00 57,000 00 28,500,00 00

AMOUNT K 40,000 00 20,000,000 00

AMOUNT K

500,000 00 250,000,000 00 80,000 00

60,000 00