TO MAKE NIGERIAN AGRICULTURE GREAT AGAIN

2016 Global Enterprise Experience: Team 26

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Developing countries in Africa are lacking good roads, stable electricity and modern machinery. These factors contribute to fresh crops rotting resulting in big loses for local farmers. Because of this agriculture looks unattractive and somewhat difficult.

The problem of infrastructure and electricity sources is not an easy one to solve. Our team came up with an intermediate solution that will help local farmers to preserve food, promote social farming and will show how cooperation will help to feed people in need and develop some useful skills for farmers.

We want to build a warehouse in Northern Nigeria, where the biggest amount of farms is concentrated. Local community will help farmers to pay a fee of 15000 USD per year. All farmers will own this facility and they will have to cooperate to make the most out of it. Along with a storage facility, we provide a canning machine, that will allow preserve food for years.

In return, community will consume food stored in a warehouse with 20% discount, which will make it affordable for low-income residents in rural areas and will promote locally grown food. Also, in months of shortages there will be a quiz night every month, where people can organize teams and compete with each other. The winner will get some free food.

Our project represents a big value. Even though the return on investment is only 1%, it represents a big potential to grow into a factory to produce canned food to the biggest market in Africa. Currently, there are no local food production plants or locally produced food on the market. We believe the potential of this project will increase employment in rural areas, will give opportunity to local farmers to break into the market and will give them skills of working with a pressure canner. The local low-cost production of canned fruits and vegetables will ensure people do not have to travel far into town to buy food, low-income families do not have to suffer from hunger and do not necessary have to have a fridge to keep food for long. This model could be applied in counties like Ghana, Cameroon and Niger.

According to UN’s Food and Agriculture Organisation (FAO) more than 40% of food produced in developing countries is wasted before it reaches the market, with 50% of food waste in Nigeria. (Gustavsson, Cederberg, Sonesson, van Otterdijk, & Meybeck, 2011) This is happening due to a lack of consistent food processing facilities. At the same time population in developing countries, such as Nigeria, is growing rapidly. This represents a potential market as well as work force.

In particular, in Nigeria, where 50% of population live in rural areas, agriculture is a vital sector. Without good roads, stable electricity and lack of investment, crops cannot be stored in coolers or transported to the markets immediately. This rises a problem of appropriate storage or processing facility that will help crops to stay in a good shape for a while. To solve this problem, our team wants to propose a building of storage facility with a canning machine in a city of Zaria, Northern Nigeria, where are the most of the farms located.
Below is a multifunctional storage facility with a pressure canner to preserve fruits and vegetables. Canned fruits and vegetables can be stored in the underground storage section, while grains can be stored on the right side of the warehouse. Cassava can be stored in boxes in the underground storage as well, as it requires dark chilly room.

Solar panel to support the stable work of pressure canner (12Kw)

Grains storage

Underground storage of cassava and canned fruits/vegetables

Food gets sterilised and stored

Fruits and vegetables packed in a jar with salty water or fruit juice go through pressure canner to get sterilised

We use jars because they can be recycled

This facility will help farmers to preserve food and keep it for about 2 years. This, in turn, will allow them to do trading during the months when there is a shortage of fresh crops. It will also enable local people to buy straight from farmers, so there is no need to travel far into town. Another advantage of canned food is that it does not necessary have to be stored in a refrigerator, so low-income families can afford buying vegetables and fruits. After all, buying straight from a manufacturer always means lower prices, than from a retailer. Such facility empowers local farmers and allows them to break into Nigerian market.

Our team offers this facility for 15000 USD per year.

This facility is too expensive for a person with an average income of 5000USD/year.

Our team thought we could combine the advantages of consumers and disadvantages of farmers.
Our team wants to promote collaboration in the agricultural industry, in the world it is known as “social farming”.

In the months of shortages, once a month in the warehouse will be running a quiz night. People from the whole local community can get together and form teams. By the end of the evening, the winning team gets free food and the rest have a good time!

Community gets to buy products from farmers stored in the warehouse with a 20% discount.

What future brings?

#1 We believe this warehouse can become a locally owned business. Purchasing a bigger volume pressure canner will help to produce more vegetables and fruits for sale at supermarkets. The opening of a local plant will increase employment and overall wealth. As Nigeria has got the biggest market in Africa so far and just growing middle class, democratic pricing will ensure even low-income families can afford to feed themselves.

#2 We believe our model can be applied in other rural areas in countries such as Niger, Cameroon, Ghana. We will be looking at these potential markets after Nigerian launch.

#3 We believe people will develop interest for healthier food which means less health issues.

#4 We strongly believe in a value that will be built over time. The relationship between farmers and community, the cooperation and understanding of how important it is to be able to feed yourself not relying on imported food. If communities will learn how to collaborate when it comes to food, it will tackle a problem of hunger in Africa.

#5 Finally, it will be a good move to start producing and selling locally grown, as 90% of food is imported.
Our target market or end user is rural community in Nigeria. Before the beginning of crude oil exploration, some Nigerian states were top producers of cash crops like cocoa and rubber. Forbes magazine mentioned that agriculture played a big role in boosting Nigeria’s economy and lives of large rural population. (Obasanjo, 2014)

Our project will concentrate on Zaria, Kaduna State, Northern Nigeria. Zaria’s economy is primarily based on agriculture.

Farmers there can be classified as those who grew up practising farming, those who treat it as a second source of income besides their full-time work and retired men and women who have access to loans to start large scale farming and purchase machinery.

In Nigeria, people like spending time outdoors. This is a trend that can develop an interest to healthy eating options which include vegetables. If there is a cheap healthy option on the market, they will definitely look at it.

The other trend is about culture. In Nigeria celebrations are very rampant, from festivities, wedding ceremonies, birthdays, naming ceremonies and burials. These celebrations involve a huge amount of food.

Because of the lack of stable internet connection or no internet at all in rural areas, we decided to go “people’s way”. One of the members of the team has met up with a Head of District to discuss our facility. The message will fly around quickly and by the time constructions begin, people will already be aware of it.

We would also like to run an opening ceremony, once the construction is completed. This will resonate with Nigerian love for festivities.

Why people will buy?

- Because they use food for their favourite activities
- Because the price is affordable for the community as a whole
- Because buying canned fruits and vegetables from farmers will be cheaper than buying imported products
- Because communal spirit of Nigerians will tell them to support home-grown
- Because canned vegetables can be stored for long even without refrigerator

My child is your child, so whatever I want for my child, I also want for yours.

Nigerian wisdom
To make it happen we will need to find those who will help us fund it. We plan on running fundraising on Africa Day in Wellington, New Zealand for the next 6 years, and the target is 1000 USD.

KICKSTARTER.com is a website that allows start-ups to raise capital, and we plan on getting 100000 USD to cover the cost of pressure canner.

Finally, our potential investor is Venture Capital. Venture capital is money provided by investors to early stage firms and small businesses with perceived high growth potential. In return for their investment in a business, Venture Capitalists hold a certain percentage of shares in the company. Our goal is to get 100000 USD to cover all building costs. (Ventures Africa, 2015)

Our project requires a significant injection of funds to accelerate growth. This is because of building expenses. In figure representing variable and fixed costs for the first year, we can see that land (37,713 USD), building materials (36,520 USD), labour (24,000 USD) and transportation of materials and machinery (10,000 USD) will be the most expensive. Another big expense is a purchase of pressure canner (10,000 USD) and solar panels (3,480 USD). In other expenses we included administrative costs and any other costs associated (8,000 USD). As a building does not require much investment in the nearest future, there are no costs associated with it. In the nearest future we accounted costs for machinery repair (2000 USD) and fire alarm repair (80 USD)

In our project we’re looking at the period of time of 10 years. The estimated total cost over 10 years is 131,316 USD. The revenue forecast is calculated as a summary of community payments (15000 USD/year).

The internal rate of return is 1%. With farmers knowing how to produce canned food, this facility represents a big value and potential of becoming a first canned food factory in Nigeria. In year 10 we plan on selling our business for 126,000 USD.

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Discounted rate 4%
References and acknowledgements


Photos: Google search

The biggest contribution on information was made by our team members living in Nigeria Ogunde Sunday Fumilola and Olukanni Elisha Kehinde. They used their own knowledge and life experience.