

Developing profitable and sustainable  
farming and processing business models in  
the cassava industry

***PROFITABILITY AND  
GROWTH OF CASSAVA  
BUSINESS IN NIGERIA:***

Keynote Address delivered by  
Folusho Olaniyan OON  
at The National Cassava  
Stakeholders Forum, FUNAAB.  
Friday 21st May 2015

Folusho Olaniyan

---

## **PROFITABILITY AND GROWTH OF CASSAVA BUSINESS IN NIGERIA: CREATING WEALTH AND GROWTH OPPORTUNITIES ACROSS THE VALUE CHAIN.**

*Nigeria is the world's largest producer of cassava at an estimated 54 million tonnes in 2013, accounting for 21% of the total global production.*

### **Is cassava business profitable?**

Profitability is the ability of a business to earn a profit. A profit is what is left of the revenue a business generates after it pays all expenses directly related to the generation of the revenue, such as producing a product, and other expenses related to the conduct of the business activities.

There are many different ways for you to analyse profitability. Profitability ratios are a way to measure the business ability to generate revenue compared to the amount of expenses incurred.

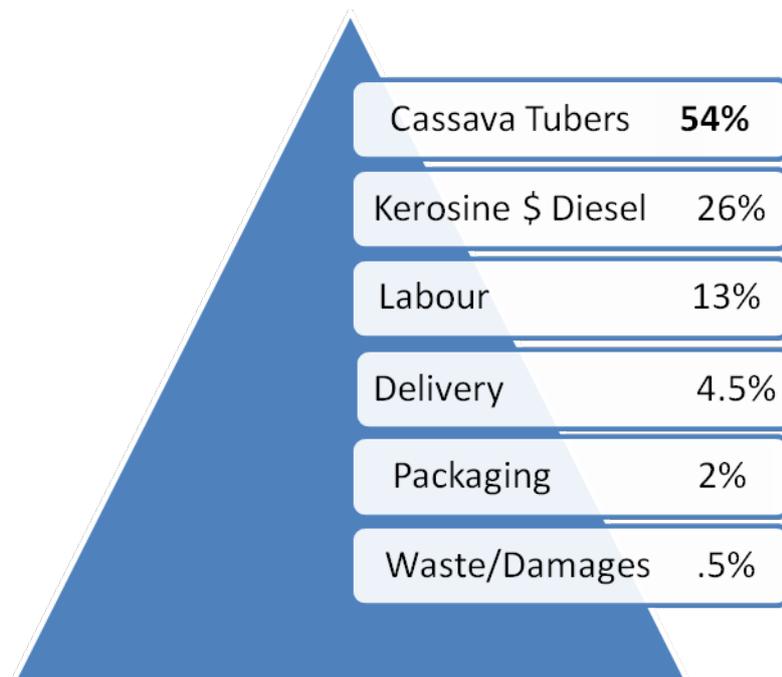
1. **Net Profit Margin measures the profitability of your business.**  
**Calculation** = Net income/Net Sales x 100
2. **Gross Margin** measures the cost of production  
**Calculation= Gross Profit x Net Sales x 100**
3. **Net Operating Margin** tells you how much costs unrelated to producing the product for sale are cutting into your profits; which include general business, other staff and administrative expenses of the business.  
**Calculation = Operating Profit/Net Sales x 100**
4. **Return On Assets** measures how effectively and efficiently you are using your business assets to generate profit.  
**Calculation=Net income/total assets x 100**

### **HQCF SMEs**

Most SMEs cannot break even at N80, 000 selling price per tonne which is the acceptable price to flour mills, who are expected to be the largest consumers

of HQCF.SMEs need to look inwards and explore the application of cost saving measures to improve profitability.

*SME Standard Cassava Production Costs Ranking Using a 3 tonne/day capacity SME as a model.*



**‘Cassava tubers are the root of the matter’**

***Pressure points are cassava tubers, energy and labour.***

The category percentages of cost items trend is similar for all categories of processors. To improve profitability, the respective value chain players must identify the pressure points, and collaborate on a business process review exercise.

### **Starch Manufacturing Plants**

Based on the assumption that the Lowest Selling starch house sells starch at N145,000 per tonne while highest sells at approx. N169,000 per tonne. Net

profit for lowest selling house is 7% while net profit for higher selling starch houses is capped at 15%.

With the drop in the value of the naira, a rare and reasonable opportunity has opened up for starch manufacturers to increase their profit margins now that imported starch price may become uncompetitive.

*Profit is critical to sustainability*



## **Farmers**

*Managing root supply:* A key issue is the supply of the roots and the associated need to be close to farmers to work with them and manage their expectation. Many of the cassava-using companies have resulted to working directly with smallholder cassava farmers to establish supply. Cassava processing Companies would have collapsed if this level of engagement had not been possible.

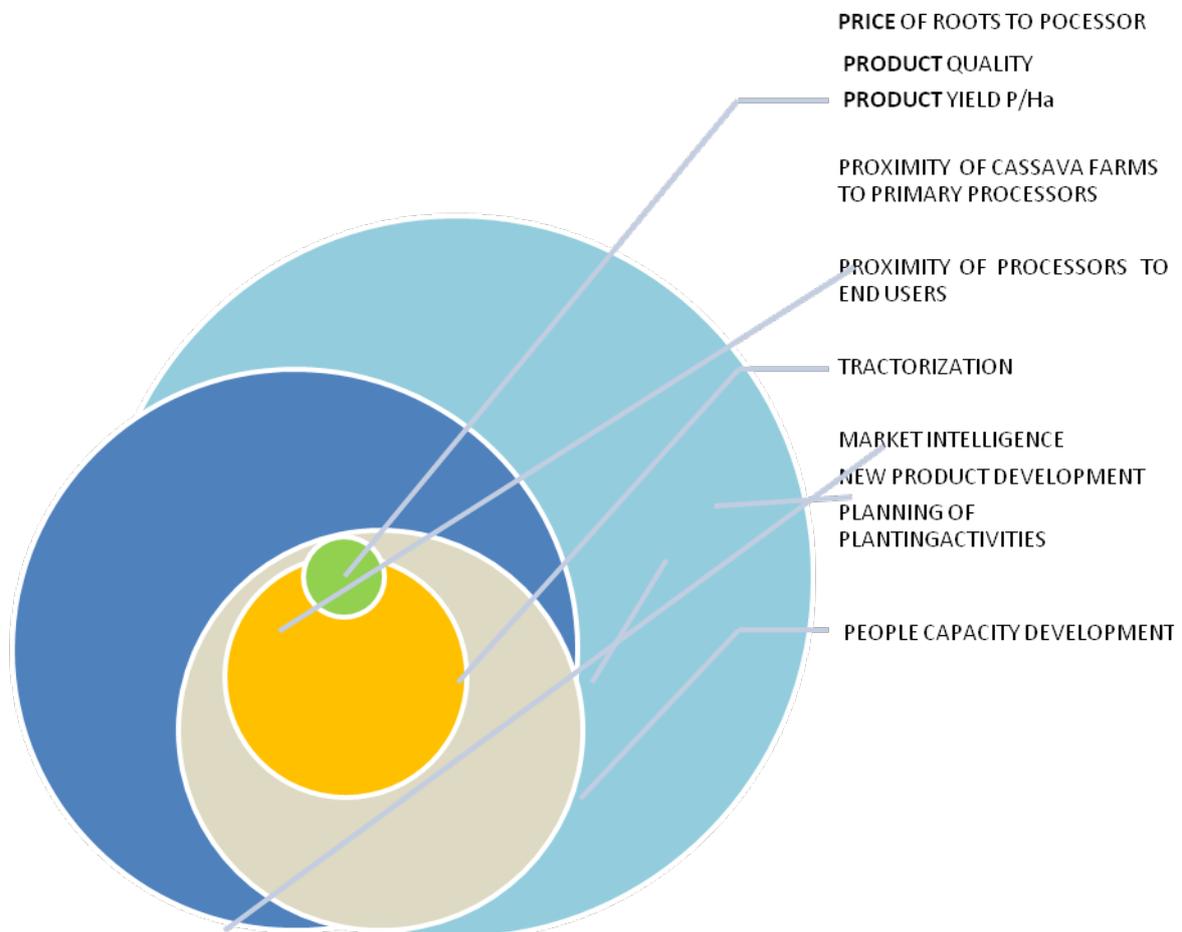


**How can the industry be grown and sustained with visible dividends that will attract substantial foreign investment?**

**CASSAVA VALUE CHAIN BUSINESS ACTIVITY REVIEW TABLE**

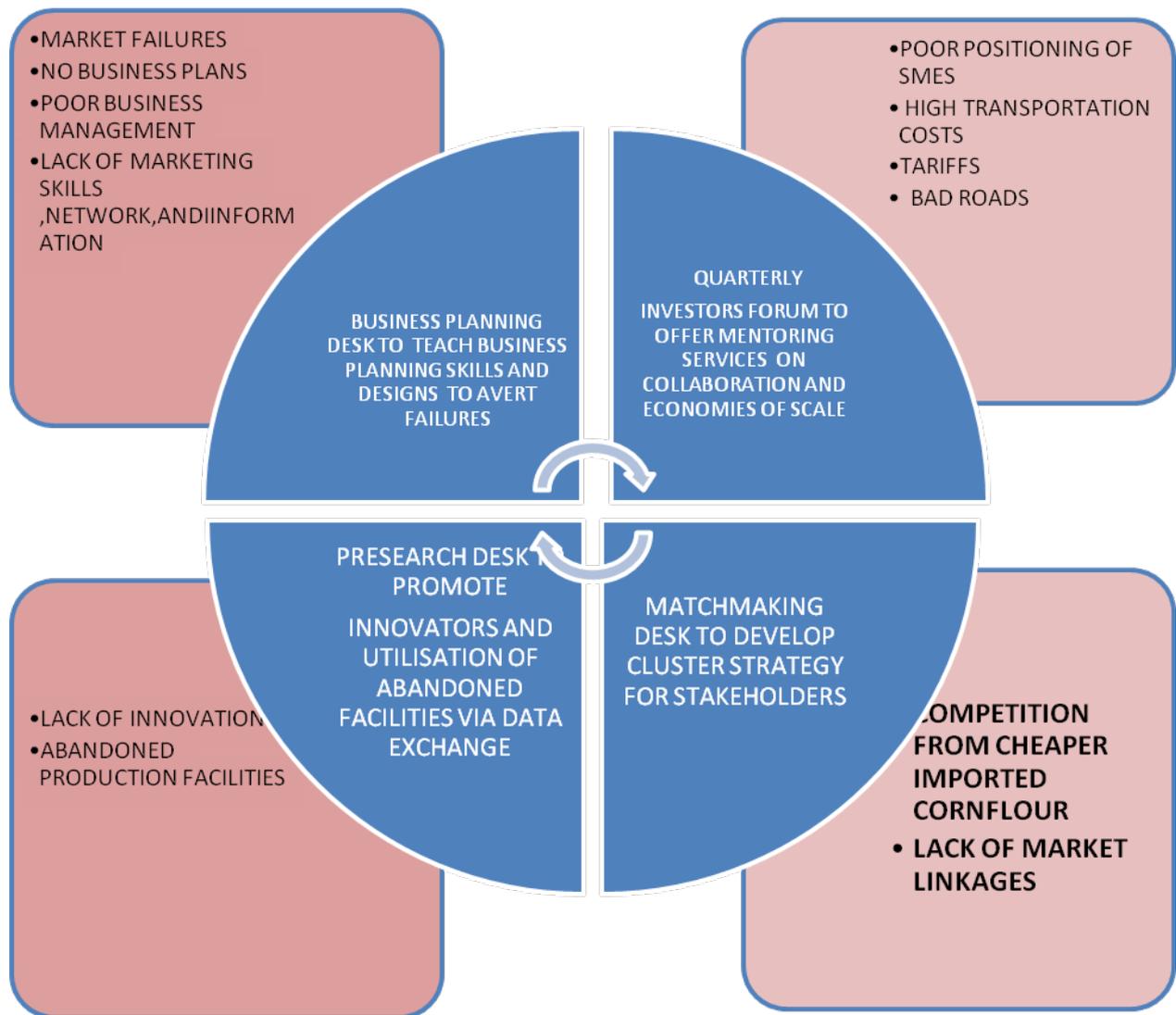
<b>Pressure Points</b> ↓	<b>Farmers</b>		<b>SME Processors</b>		
	Current Metrics	Desired Outcomes	Current Metrics	Desired Outcomes	Remedial Strategy
Tubers	Selling Price of roots. N10,000/MT average.		HQCF Selling price per MT N80,000 average. Starch Selling price per MT N160,000 average		<b>Alternative selling channels:</b> Sell to Premix manuf. companies at N90,000/MT to get higher margins. Forward integrate and start production of own snacks and bread.
Diesel for Generator	NA		Consumption per hour		Invest in Solar Energy Subscribe to alternative energy producer. <b>MAN</b> model.
Kerosine For Dryer	NA		Consumption per hour		Invest in Solar Energy Subscribe to alternative energy producer. <b>MAN</b> model
Labour	Planting. Weeding and Harvesting costs		Staff costs.		Mechanization of planting, weeding, and Harvesting via smallholder farmer groups.
Transport	Movement of tubers to factory gate.		Movement of products to market.		Investors can set up Farmer cooperatives Haulage companies, to enable standardization and competitive transportation costs.
Packaging	NA		Packaging costs of bags for cassava derivatives.		International manufacturers of packaging equipment can be approached to invest in SMEs packaging traditional garri, fufu etc.
Waste Management	NA		Channeling of waste water and tuber peels.		Donors can be approached to fund consultancy on recycling and irrigation.
Market Linkages	Industrial and domestic buyers of cassava products< 11 SMEs>		Industrial buyers of cassava products. < 5>		Investment campaign to prospective end users to transit to investment partners.

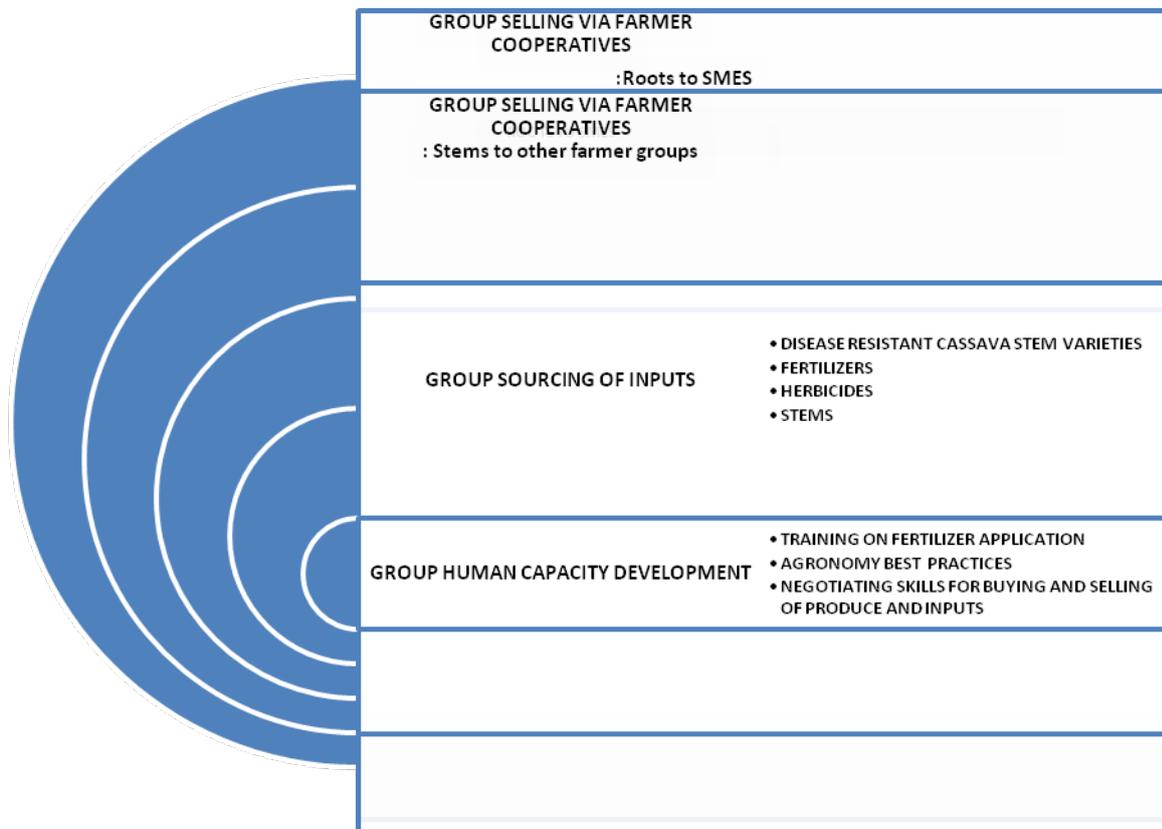
## PROFIT ENABLERS IN THE CASSAVA INDUSTRY



*Farmers can increase income by up to 70% by using improved varieties. Traditional cultivation without the use of inputs earns a farmer N51,000 profit per hectare per season; whereas improved cassava cultivation using mechanized land preparation and inputs will give improved earnings of N88,000 profit per hectare per season. **Investors should be encouraged to invest in smallholder farmers cooperatives.** The collaboration will enable a structure that will open up areas of synergy for savings on the main pressure points.*

## Constraints to Growth and Desired Outcomes

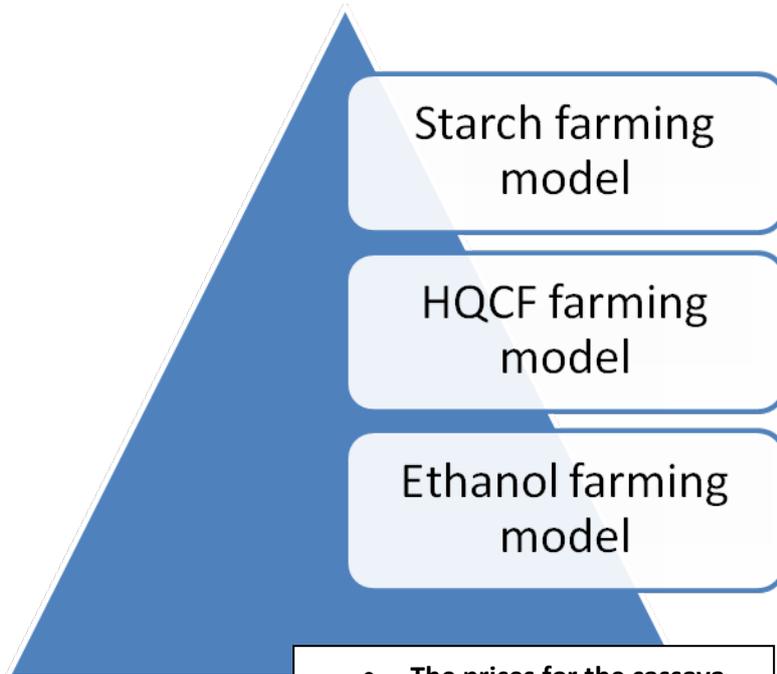




### Investor participation will enable systemic Segmentation of Farmers

Farming models can be funded in segments, in relation to their target derivative, starch content and yield .Investors will open up corporate market opportunities and enable Farmer cooperatives to target inputs sourcing and yields to specific needs of specific sectors across the value chain at best prices to be achieved through bulk buying.

Investment plan can be tailored to the models reflected in the farming pyramidmodel below.



*Pyramid base starts with Ethanol which has the lowest conversion rate, and graduates upwards to starch with the highest conversion rate.*

- **The prices for the cassava roots in the respective sectors will be set based on market price per starch content.**
- **Prospective Farmers will be enlightened on the different farming models prior to investment so that a sustainable business model can be developed for analysis preceding investment.**
- **Smallholder farmer groups will have the opportunity to attract investors if they operate transparent farming models that are measurable.**

	Conversion Rates	Net Margin
Food grade Starch	3.6 tonnes cassava:1 tonne	12%
HQCF	4tonnes cassava:1tonne	2%
Ethanol	6tonnes cassava:1tonne	NA

## TRADITIONAL CASSAVA FOOD INDUSTRY

Traditional cassava derivatives sold mostly in the open market are: Garri, Fufu, and Starch. These foods are processed mostly by women referred to as microprocessors. This sector accounts for close to 90% of the current cassava industry's activities.

The margins for these traditional foods are higher than industrial cassava products but the industry is fragmented, and processors don't really account for home consumption from their production.

If the processing is tracked as a business, below are standard **gross margins**.

Product	Conversion ratio	Margins
Garri	4:1	68.7%
Fufu	2.5:1	45%
Wet Starch	3.3:1	60%

38



## **CONCLUSION**

*To open up the cassava industry for real dynamic growth, local and international companies need more awareness raising on financial benefits of using cassava-based raw materials e.g. in snacks and biscuits production, the beverage, seasoning, and pharmaceutical industries.*

*Investors are also required to restructure smallholder farmer groups to operate like profitable business ventures that will have the ability to attract funding and partners from within and outside Nigeria.*

*These are the vital “missing middle” i.e. companies which transform cassava into the form required to supply and sustain the cassava-using industry. Partnership and innovation platforms are needed locally, while international forums will also be useful. Industrial processing of cassava can play a key role to further enhance the potential of cassava production and transformation through smallholder involvement.*

*High sales/turnover is key to profitability, hence market development is the key driver of the profitability we desire in the Nigerian cassava industry.*