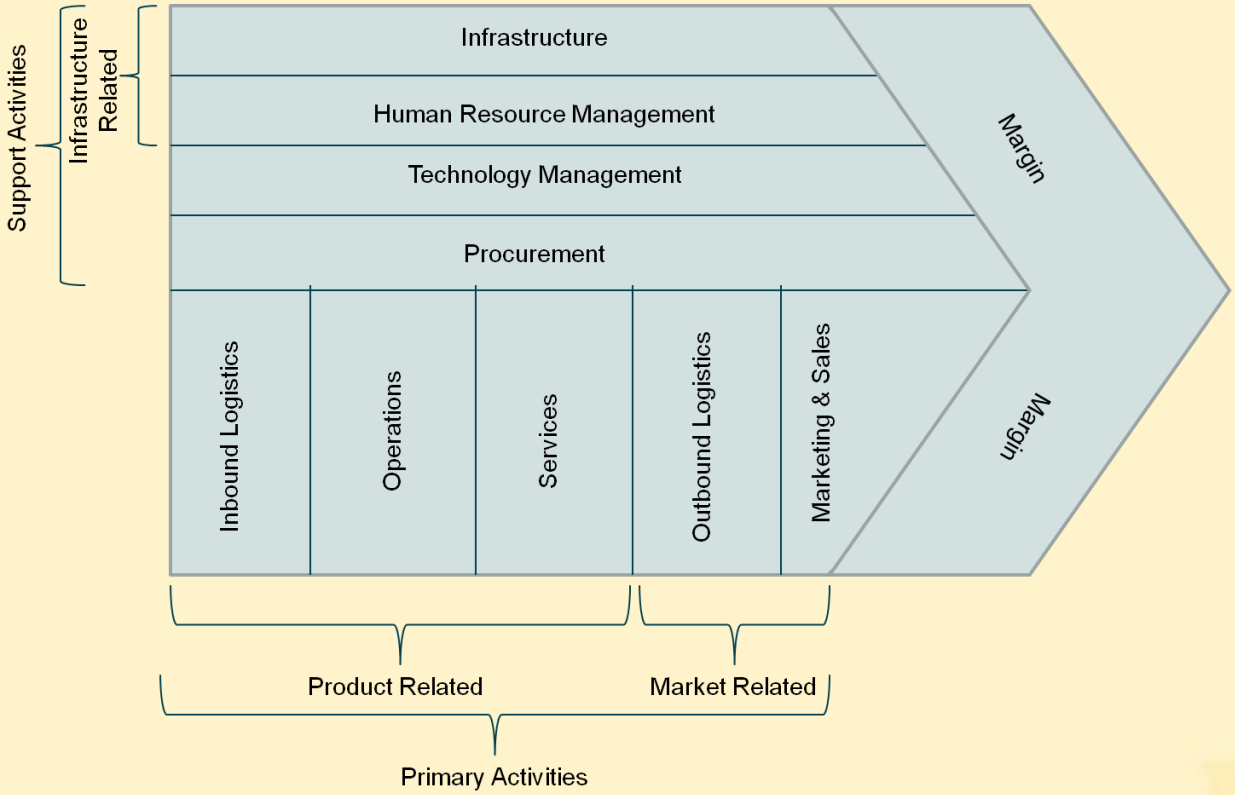
"Going into business without a business plan is like going on a mountain trek without a map or GPS support – you'll eventually get lost and starve!"

— Kevin J. Donaldson

If you firm like to maintain a sustainable business, a firm must understand how its products serves customer needs better than potential substitutes; the technology of production, distribution and sales; and the business's costs (Porter, 1985).



Porter's Value Chain Activities

Difference between supply chain and value chain?

Difference between competitive and comparative advantage?

comparative advantage refers to “the ability of a party (an individual, a firm, or a country) to produce a particular good or service at a lower opportunity cost than another party in a particular region or location”.

A firm **can achieve competitive advantage** IF it posses **‘capabilities’** that allow it to create not only positive value but as well additional total value than its competitors (Porter, 1985; Hooley et al, 2004).

- Company's **profitability** – **comparative and competitive advantage**

- By understanding why a **company** can **create value** and whether it can **continue** to it **in the future** is **a necessary first step** in diagnosing a **firm's potential for achieving a competitive advantage in the marketplace** (Hitt et al, 2007; Spanos and Lioukas, 2001).

- Therefore, **a firm must understand** how its products serves customer needs better than potential substitutes; the technology of production, distribution and sales; and the business's costs (Porter, 1985).

Business Plan for Early Generation Seed: How it can be adopted for Processing Industries









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Structure of Presentation

SASHA
Sweetpotato Action for Security and Health in Africa

Part 1	• WHAT, WHY & HOW - BUSINESS PLAN
Part 2	• Why do we need business plan for Early Generation Seed (EGS) of sweetpotato
Part 3	• WHAT, WHY & HOW: REAL TIME COST DATA COLLECTION in seed supply chain of pre-basic and basic sweetpotato seed delivery system?
Part 4	• Current status and Way Forward

BUSINESS PLAN

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WHAT

- Management tool for the potential investors to make decision on their investment
- It is different from business model.

WHY

- To plan a new venture or even expand your business in future.
- To understand the market situation.
- To determine which strategies to adopt in which moments.

HOW

- Financial analysis - investment required; expenses, revenue, return on investment – to keep business operational
- Marketing projections – forecasting demand
- Marketing strategies through a executive summary

Ingredient of the BUSINESS PLAN

Source: http://blog.luz.vc/en/how-to/how-to-create-an-excellent-business-plan/

Why do we need business plan for Early Generation Seed (EGS) of sweetpotato?

BUSINESS PLAN

TO HAVE A VIABLE COST RECOVERY ENTERPRISES

Development of Business Plan & Implementation

Step 1:

Business Model

Step 2:

Financial Analysis

Step 3:

Institutionalization of Business Plan to utilize Revolving Fund efficiently in order to run business sustainably in the long-run

Background

- NARIs in 14 SSA countries expand their pre-basic sweetpotato seed production in year 2016.

- 10 institutions have started to implement their business plans; of which six institutions earned revenue from the sale of seed, to start their revolving funds.

- As part of business plan, SWOT analysis carried out; strategies for exploiting opportunities, and for mitigating weaknesses to reduce vulnerability to threats in the business environment.

Source: Rajendran et al 2017

Financial Analysis in Y2016

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- Products: pre-basic and basic seed
- Cost structure: tissue culture and screen house for pre-basic seed; open field for basic seed.
- Type of cost: variable cost, materials and consumables and fixed costs
- Financial Tools: NPV, IRR, Gross Margin

challenges

- Cost information - Recalling; hidden cost (Wastage/losses of planting materials);
- Precise estimates of Net Margin due to inadequate data i.e., fixed or overhead costs
- Establish optimal production of TC plantlets to supply a specified (or standard) size of screen house
- Establish optimal number of ratoons at screen house and in the open field
- Purchasing power parity (PPP) due to different recalling periods
- Exchange rates
- Fixed costs (linear depreciations) and share of sweetpotato production to the total farm budgeting
- Several assumptions on output targets and inputs used during production not clear
- Precise estimates of chemical usages for TC plantlets production for the targeted outcome
- Institutionalization of business plan implemented but it is identified that it is influenced by policies, administrative, financial, technical and socio-cultural factors which requires an assessment for the further improvement of institutionalization of business plan.

Step Forward

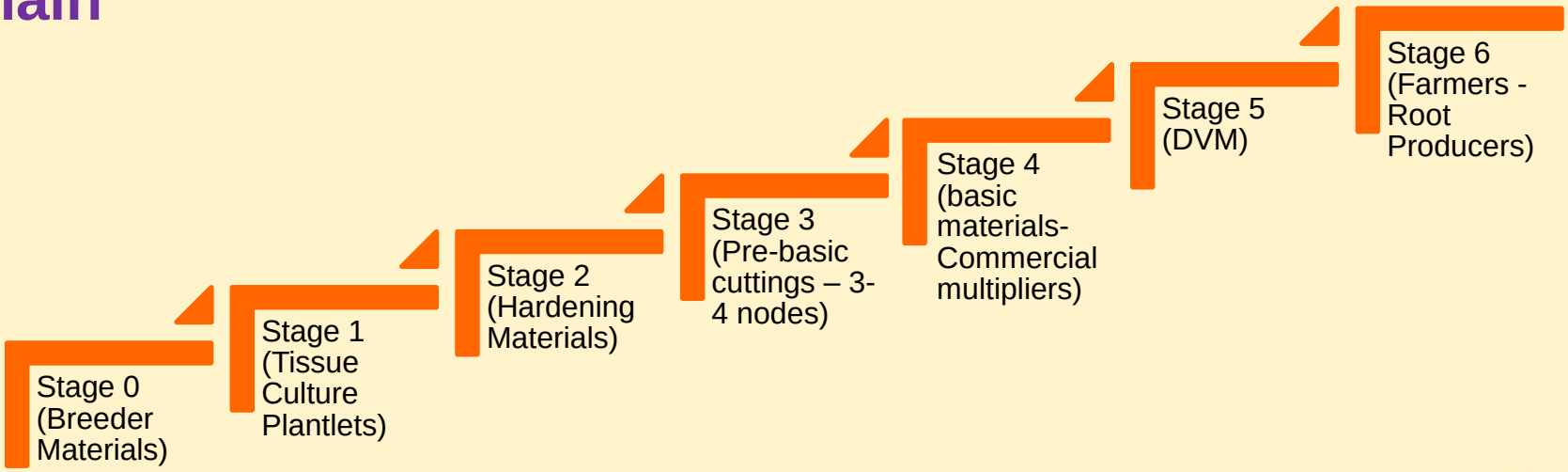
- Price Strategies
- Assessment of institutionalization of Business Plan
- Strategies for linking revolving fund
- Database for potential buyers
- Marketing strategies by involving marketing division from NARIs.
  - Whatsup platform for potential buyers to track real-time orders.
  - Strengthening stakeholder meetings as business orientation.
  - Displaying price information on NARIs website through their communication department (KEPHIS has done now)
  - Participating in a fair and constant touch with DVM and commercial multipliers

Price Strategies

Secret of the business -

- Pricing your product perfectly.
- "It's part art and part science.“ - Charles Toftoy, associate professor of management science at George Washington University.
- Pricing your product usually involves considering certain key factors, including pinpointing your target customer, tracking how much competitors are charging, and understanding the relationship between quality and price.

Sustainable seed business through formal seed value chain



When is the right time to review your seasonal prices?

- When introduce a new product or product line;
- When costs change (i.e., electricity);
- When decide to enter a new market;
- When competitors change their prices;
- When the economy experiences either inflation or recession;
- When sales strategy changes; or
- When customers are making more money because of your product or service (i.e., when farmers gets higher yield due improved seed quality and then gain revenue and profit).

Price determination

- Type of customers and their need keeping sustainable seed value chain (i.e., NGOs, multipliers)
- Cost of production (i.e., fixed and variable costs)
- Competitors (Private seed enterprises)
- Business Environment (e.g., market for roots)
- Discounts based on time of orders and payment (i.e., advance payment)

Cost of Production

Real-time Data Collection Method

What, Why and How?

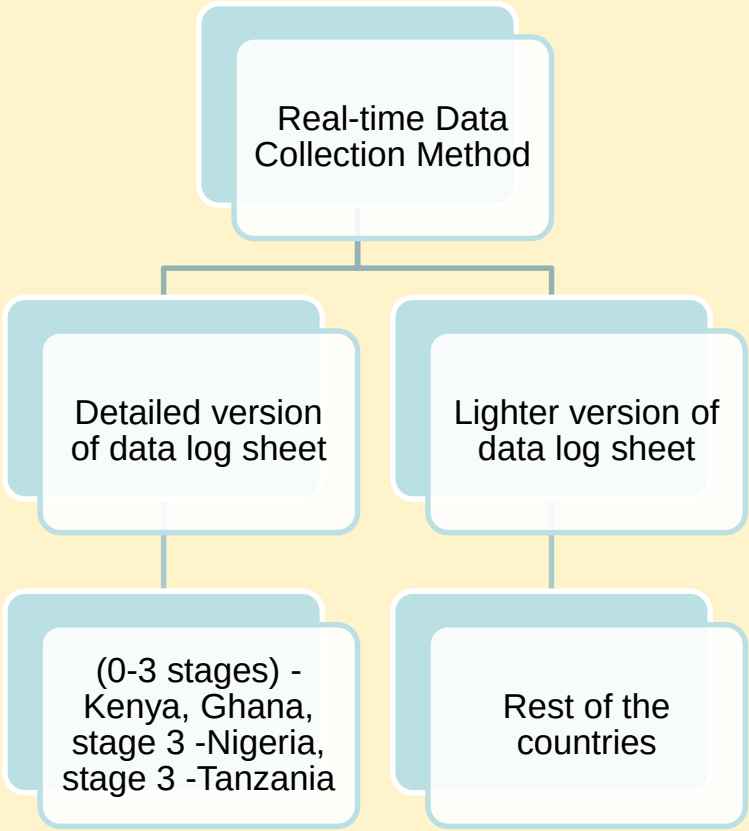
- **What:** All relevant data on production activities will be collected immediately as production activities occur without any delay to accumulate data information.

- **Why:** Due to lack of accuracy in the cost data through recall method.
- Case study approach is appropriate for developing a business plan for a firm; cost data needs to be collected on real-time basis during actual production (Padilla-Bernal et al. 2015). However, there are some challenges in this method:

- **Disadvantage** of the case study research approach – it is not easy to make inferences at industry level.

- Quality of data - type of information required for specific production unit (NARIs); difficulty in obtaining it; lack of interest/or coordination among team members

How to implement this method


Real-time Data Collection Method
Detailed version of data log sheet
Lighter version of data log sheet
(0-3 stages) - Kenya, Ghana, stage 3 -Nigeria, stage 3 -Tanzania
Rest of the countries

Seed Value (why) Chain

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	Stage 0	Stage 1	Stage 2	Stage 3	Stage 4
Inputs					
Activities	• Cleaned & Indexed Materials (No. of line)	• Invitro Rapid Multiplication (No. of plantlet)	• Hardening Materials (No. of cutting)	• Pre-basic – Screenhouse Multiplication (No. of cutting)	• Basic materials- Basic multipliers (No. of cutting)
Output					

Planning activities at every stages in the seed supply chain

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multilayer of cross-checking at every steps

Step 1

- Identifying team members

Step 2

Identifying on-going activities and Mapping seed multiplication calendar

- Identifying potential production targets
- Planning for stakeholder meeting to record actual demand

Step 3

- Describe planned activities
- Identifying responsible person
- Identifying potential buyers

Step 4

Identifying fixed cost information, define assumptions

Step 5

Organizing files

Step 6

- Pilot Survey based on on-going activity or assumption

Step 7

- Cross-checking Team members log sheet within team members

Step 8

- Entering data into Dropbox
- Cross-checked by Agri. Economist

Real Cost Data Collection Method

Stage 4 – Macro Cost - CBA - Dashboard	Breakeven price, Net and Gross Margin, Markup, NPV, IRR & Sensitivity Analysis and Pricing Strategies
Stage 3 – Micro cost estimates	Consolidated Cost estimates for each category of costs
Stage 2 – Macro Log sheet	Consolidated Log sheet for each category of cost
Stage 1 – Micro Log sheet	Individual Log sheet by category of variable and fixed costs i.e., Inputs Qty, Labour activities, Machinery & materials and production, Wastage and Sales

Format of Log Sheet

		Cost Category		BLOCK AND CROP DETAILS									
		Variable Cost	Inputs Costs	BLOCK NO		CROP NAME							
			FROM (MONTH&YEAR)	VARIETY NAME	V1	V2	V3	V4					
		SEASON	TO (MONTH&YEAR)										

Cost Summary

S.No	Name of the person who filled this input	Particulars (Items/or activity)	Date of use (dd/mm/year)	1=INPUT; 2=CONSUMABLE GOOD; 3=SERVICE COSTS; 4=OTHER COSTS	Quantity purchased	Unit Name for QTY purchased	Total Price paid	Currency Name	Quantity used	Unit Name for Qty used	Status of usage (1=ongoing; 2=completed)	Qty contained per purchased unit	Exchange Rate (1 USD = in Local Currency) during the purchase time
1													
2													
3													
4													
5													

Preliminary Results

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Stage 1 – TC Plantlet, Stage 2 – Hardening Material and Stage 3 – Pre-basic seed

Stages	Stage 1	Stage 2	Stage 3
Unit Name	**Tissue Culture (TC) Plantlet** (pathogen tested or virus indexed)	**Hardening Materials** (Cuttings 3-4 node)	**Pre-basic seed** (3-4 node)
Selling Prices (KSH PER UNIT)	**50 to 100**	**15 to 40**	**10 to 35**

Stage 3 – Pre-basic materials (3 – 4 node)

Type of Customers	Time of order and payment system	
	Early order and Advance payment	Late order and payment
	Selling Price (KSH per 30 cm Cutting)	
Institutional (NGOs etc)	20	35
Multipliers	10	20

Q&A

Thank You!