



Cassava Seed Unit Analysis Toolkit

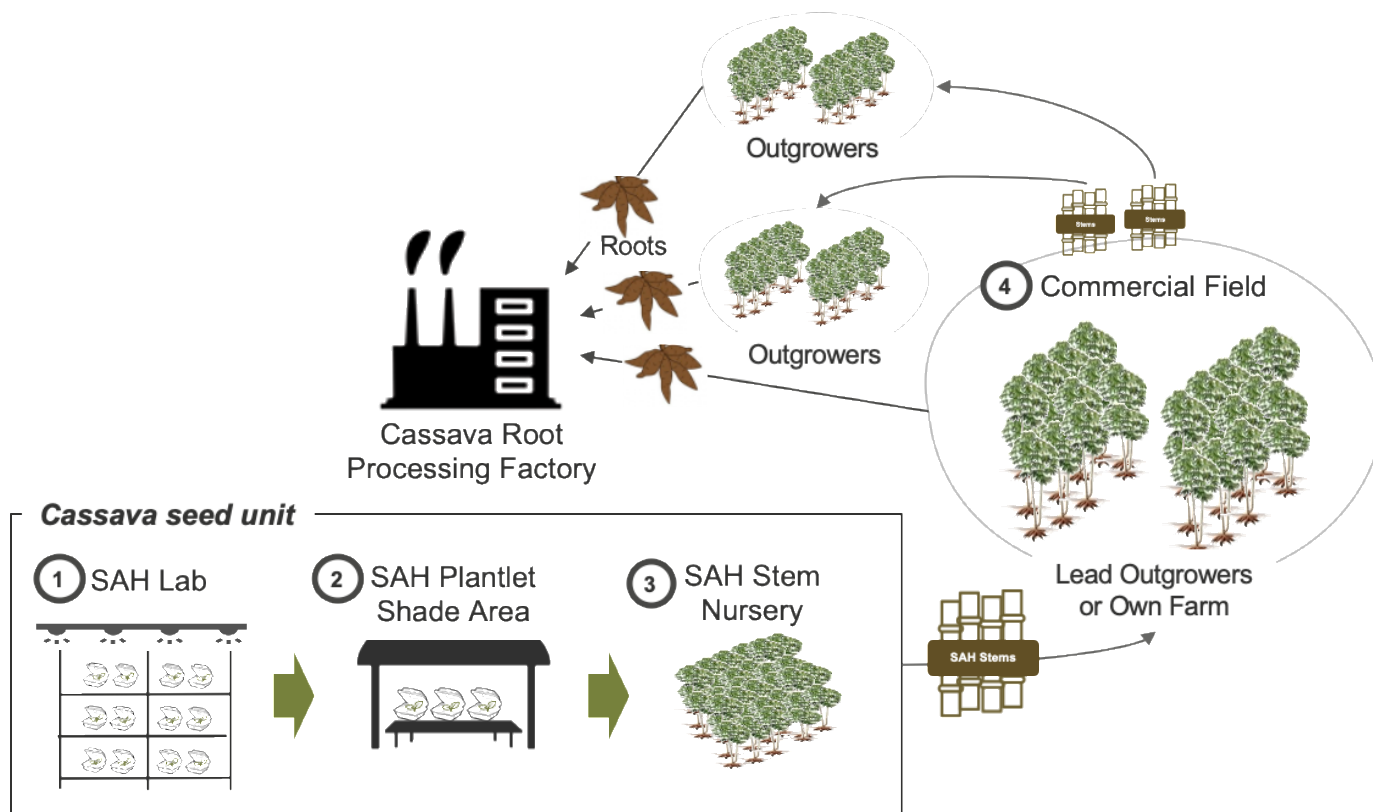
RTB Seed System Toolbox Course:
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Purpose of the Cassava Seed Unit Toolkit

Enable cassava processors to evaluate the value proposition of vertically integrating into seed production



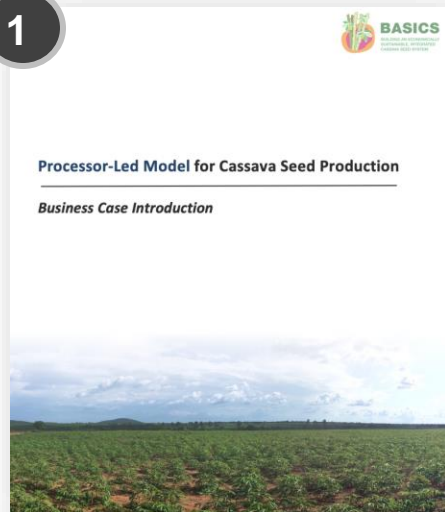
Level and uses of the Cassava Seed Unit Toolkit

Level. Cassava root processors (starch or flour)

Users. Executive & operational management of processors

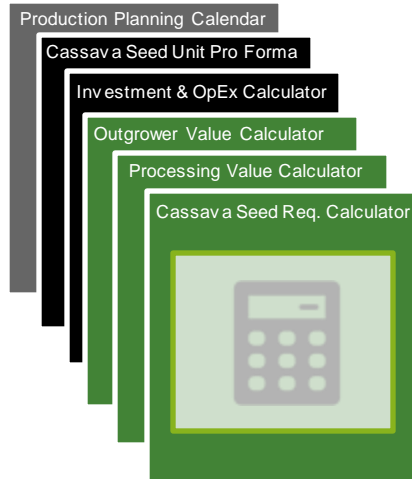
Cassava seed unit toolkit

1



Evaluating Business Model for a Cassava Seed Unit

2



Cassava Seed Unit Analysis Toolkit

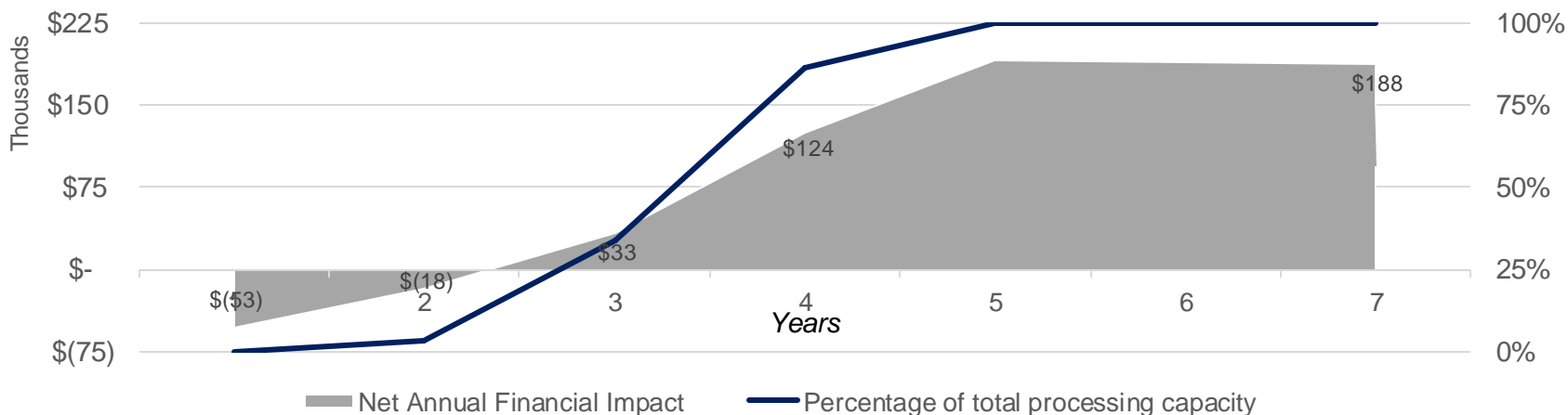


Output and audience of the Cassava Seed Unit Toolkit

Output. Business case for establishing a cassava seed unit

Audience. Management of cassava root processors

Investment in seed unit has a three-year breakeven



Price Per MT of Starch	\$350						
PLM Business Unit P&L	2020	2021	2022	2023	2024	2025	2026
Differential Starch Revenue	\$ -	\$ 5,757	\$ 58,717	\$ 150,822	\$ 218,750	\$ 218,750	\$ 218,750
Cassava Stem Revenue	\$ -	\$ 375	\$ 375	\$ 375	\$ 375	\$ 375	\$ 375
Cassava Seed Unit Investment + Operating Costs	\$ 53,389	\$ 24,558	\$ 25,786	\$ 27,076	\$ 28,429	\$ 29,851	\$ 31,343
Net Annual Financial Impact	\$ (53,389)	\$ (18,427)	\$ 33,306	\$ 124,122	\$ 190,696	\$ 189,274	\$ 187,782

Minimum sample size for the Cassava Seed Unit Toolkit

One cassava root processor



Resources for using the Cassava Seed Unit Toolkit

Number of people: Business and operation leads of a cassava root processor and a facilitator

Equipment: Computer and projector (ideally)

Expertise: Financial acumen and knowledge of root sourcing & processing operations



Timing for the Cassava Seed Unit Toolkit

Anytime that a processor is considering the value proposition of establishing of a seed unit to serve its root supply needs.



Duration, Cassava Seed Unit Toolkit

Varies by team, but at least a 2-hour working session is required to work through the methodology and to customize assumptions to a processor's operations



Steps for using Cassava Seed Unit Toolkit

Step 1. Read narrative

Step 2. Update assumptions in the modeling workbook sheets

Step 3. If value proposition looks promising, then identify the most valuable assumptions (through sensitivity analysis) and conduct primary research to calibrate them



Methods that can be combined with the Cassava Seed Unit Toolkit

Method. Demand creation trials to calibrate assumptions for the differentiated value of improved cassava varieties in the field and in the factory (ex. yield, starch level, starch stability, root morphology, disease resistance, plant structure)



Gender

There is no relevant gender aspect tied to this tool



Limitations of the Cassava Seed Unit Toolkit

The Cassava Seed Unit Toolkit is **not self-explanatory** and requires some level of facilitation

The Toolkit was developed around an SAH-enabled seed unit and therefore cost and multiplication assumptions will need to be **tailored to screenhouse on tunnel-based production systems**

The Toolkit was **developed for processors in Nigeria** and includes figures in USD & Naira. For use in other countries, the model will need to be updated to the local currency.



Main advantages of the Cassava Seed Unit Toolkit

- The Cassava Seed Unit Toolkit is a **dynamic toolkit** of customizable business analysis resources to guide processors through their due diligence process
- The analysis tools **support processors' ability to evaluate** the operational and financial **impact** of establishing a cassava seed unit
- The tools form a **major point of engaging processors** – hold working sessions, develop business case – make more informed decisions on whether to vertical integrate? And if so, how?



Thank you

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