

Financial Analysis for Early Generation Seed: A Case Study of KEPHIS



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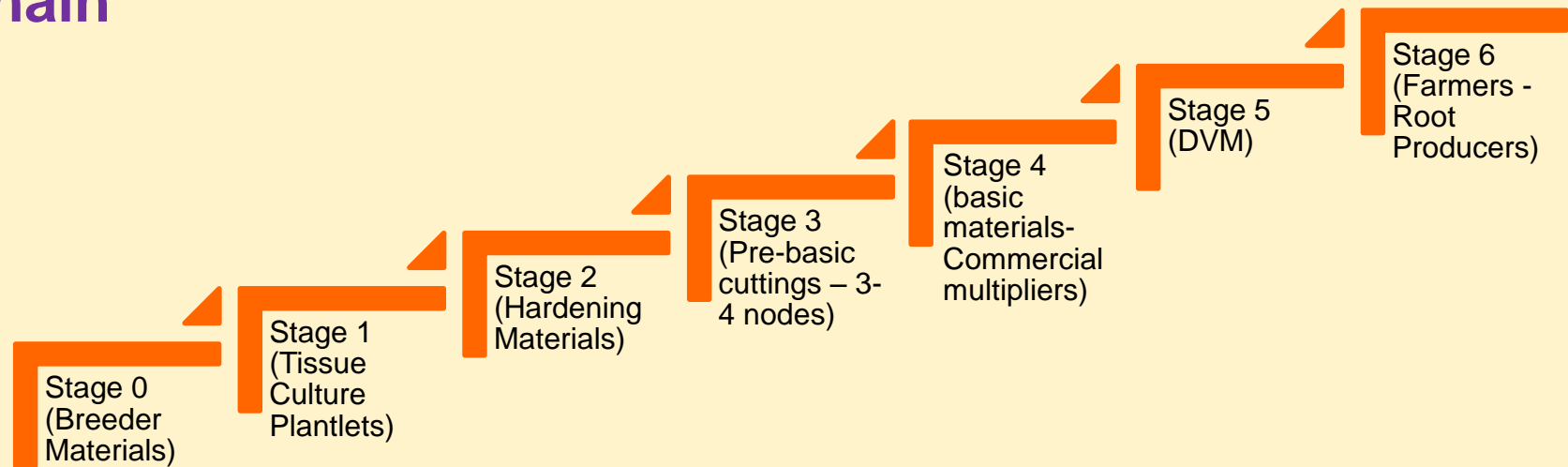
Regional Technical Support Platform for East, Central and Southern Africa, Sweetpotato Seed Systems CoP:
6th Consultation – Sustainable Pre-basic Seed Production – Progress Review, 06-08 December, 2016,
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The basic rules of pricing followed



- All prices must cover costs and profits.
- The most effective way to **lower prices** is to **lower costs and use resources efficiently**.
- **Review prices frequently** to assure that they reflect the dynamics of cost, market demand, response to the competition, and profit objectives.
- **Prices** must be established to **assure sales**.

Sustainable seed business through formal seed value chain



Steps involved in real-time data collection at each stage in the seed supply chain

Cross-checking at each step



Step 1

- Identifying team members



Step 2

- Identifying on-going activities and mapping seed multiplication calendar as per root producers' demand in peak and low season in your country



Step 3

- Identify production targets along with assumptions, potential buyers and expected demand & identify marketing strategy along with milestone



Step 4

- Describe planned activities as per cost category
- Identifying responsible person for each activity
- Tracking activity status



Step 5

- Fill log sheet for the respective production activities based on type of activity (i.e., qty, labour, machinery log sheet)



Step 6

- Once activity is completed, cross-check by staff-in-charge and certify that it is correctly entered.



Step 7

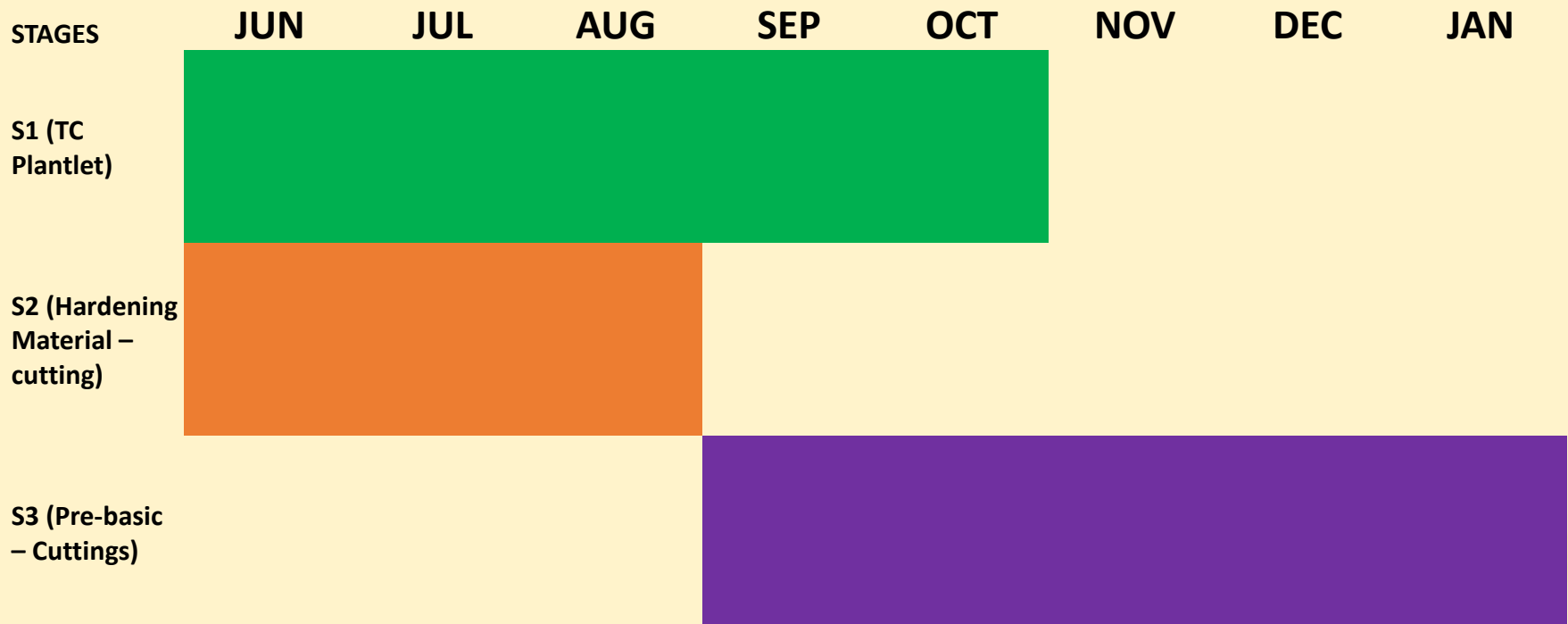
- Once it is certified by staff-in-charge, it must be handed over to Agri. Economist to record information into the cost estimate sheet.
- Store all the log sheet safely by AE



Step 8

- Carry out financial analysis and make sure that it is linked to revolving fund.
- Make sure that this excises has to be done before the stakeholder meeting.
- Draft financial report

Seed Multiplication Calendar (Macro Picture)



Product & Financial Tools



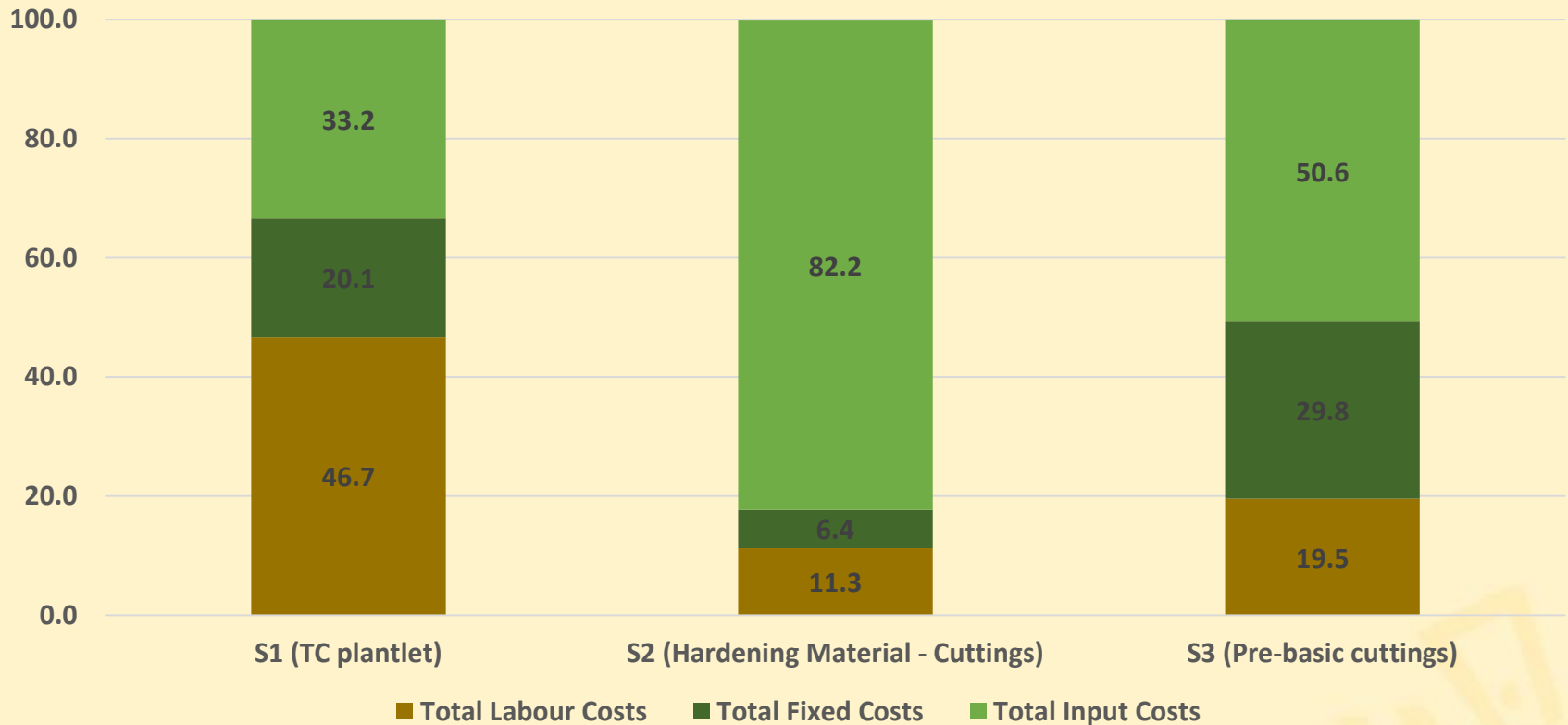
- Product: breeder material (stage 0); TC Plantlet (stage 1); Hardening Material (stage 2); pre-basic (stage 3)
- Variety: Vitta and Kabode
- Financial Cost and Benefit Analysis
- Budget Enterprises Model
- Breakeven Price – cost per outcome unit
- Transaction Cost – marketing cost
- Gross and Net Margin
- Markup (% of total production cost)
- Proposed selling price based on commitment level from the buyers

Outcome, Cost and Price



| S.No | Category | Cost/Return Breakdown (Stages (sales unit)) | S1 (TC plantlet) | Unit | Source | S2 (Hardening Material - Cuttings) | Unit | Source | S3 (Pre-basic cuttings) | Unit | Source |
|------|----------|---|------------------|------------------|-----------------------------|------------------------------------|-----------------|--|-------------------------|-----------------|--|
| 1 | Season | Period | June-Oct 2016 | Period | | June-Aug 2016 | Period | | Sept - Jan 2017 | Period | |
| 2 | Input | Planting material (Qty) | 350 | Node | Breeder material (stage 0) | 1030 | Plantlet | | 5926 | Cuttings | |
| | | Price per planting material (KSH) | 15 | Node | cost estimates from stage 0 | 34 | Plantlet | breakeven cost to cover variable cost from stage 1 | 9.7 | Cuttings | breakeven cost to cover variable cost from stage 2 |
| 3 | Output | Target outcome (Qty) | 1500 | Plantlet | TC lab | 5500 | cuttings | | 17000 | cuttings | |
| 4 | | Outcome (Qty) | 1574 | Plantlet | TC lab | 4896 | cuttings | | 15000 | cuttings | |
| 5 | | Sales Qty | 1574 | Plantlet | TC lab | 4896 | cuttings | | 15000 | cuttings | |
| 6 | Cost | Total Costs (KSH) | 67304 | KSH | cost estimates from stage 1 | 50838 | KSH | | 113445 | KSH | |
| 7 | | Breakeven price per unit | 42.8 | KSH PER PLANTLET | cost estimates from stage 1 | 10.4 | KSH PER CUTTING | | 7.6 | KSH PER CUTTING | |

Share of Input Cost, by stages



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)



Time of order and payment system

Type of Customers

Early order and Advance payment Late order and payment

Selling Price (KSH per 30 cm Cutting)

Institutional (NGOs etc)

20

35

Multipliers

10

20

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