

"Highlights"

Sector Policy Cassava

Training BPR Agribusiness Team

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Cassava Sector – Warm-Up Quiz

The plant & food

- Which parts of the cassava plant can be consumed?

Leaves – Flowers – Fruit – Seeds – Roots

How much can one cassava plant produce?

$$1 - 2 - 5 - 10 - 25 - 50 - 100 - 150 - 200$$
kg - more

- Is cassava safe to eat fresh?

Yes - No - Sometimes

How is cassava best stored?

In the Ground – Cellar – Sealed container – Store – Dried in Bags





Cassava Sector – Key Features

Cassava, key features

- Production cycle 8 months to several years, no specific harvest
- Most cassava tubers are toxic when fresh
- Cassava cannot be stored fresh
- Most cassava is home processed and consumed





Cassava Sector in Rwanda – Key Figures

Cassava is a key staple food in Rwanda

- Production on 90-100,000 hectares
- Average field size 0.12 hectares
- Production cost RWF 44/kg or RWF 120-700,000/ha (depending on fertiliser use, land rental and labour costs)
- Yield of 7-15MT/ha. Production potential is as high as 30 MT/ha.





Cassava Value Chain

Inputs

- Seeds
- Fertiliser
- Pesticides

Farmer / Cooperative

- Ploughing
- Weeding
- Harvesting

Processing

- Fermenting
- Drying
- Milling

Own use/ Market

- Storage

Storage

- Domestic

- Export

Pre-Harvest

Post-Harvest



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Cassava Value Chain - Inputs

Inputs

- Planting material is retained from harvested plants*
 (*virus resistant varieties are made available by RAB)
- Little or no fertiliser or organic matter is used for cassava
- Cassava requires no pesticides

Opportunity for input finance is very limited!





Cassava Value Chain - Farmer/Cooperative

Cassava growth

- Other crop (beans) will often grow in newly planted cassava field
- Cassava is often planted on marginal land (not "main" crop)
- Harvest time is not crucial and gradual (mostly during dry season to allow easy drying of fermented cassava chips)
- Cooperative or farmer association plays no role in growth





Cassava Value Chain - Processing

Cassava processing

- Processing to render "bitter" cassava suitable for consumption
- 1 kg of dried cassava chips = 4 kg of fresh unpeeled cassava
- Dried (fermented) cassava chips can be stored for some time
- Few commercial processors, majority processed "at home"





Cassava Value Chain - Market

Cassava market

- Sale of cassava products mainly urban areas
- Some export to neighbouring regions and international
- Market value relatively stable RWF 50/kg for raw tubers or RWF 300-500/kg for cassava flour





Cassava Sector – Financing Needs

	Input finance	Raw material collection finance	Inventory finance	Asset Finance
Farmers				
Cooperatives		X		X
Processors				X





Cassava Sector - SWOT

Strengths

- Suitable soil & climate for cassava
- All-year harvest on marginal land
- Drought resistant
- High yields and low production costs
- Stable market demand
- Cost competitive

Weaknesses

- Low nutritional value
- Long production cycle
- Requires processing for storage
- Degrades soils
- Not very tasty
- Toxic if not processed adequately

Opportunities

- Improve nutrition value of the flour by adding proteins such as soja flour
- Export potential to African diaspora in Europe and Americas
- High yield potential with adequate use of fertilisers

Threats

- Viral diseases development or loss of genetic resistance
- Slow distribution of improved (disease resistant) varieties





Cassava Sector – SWOT Specific

SWOT analysis

- Strengths & Weaknesses are specific to each client Examples
 - Good yields because of fertiliser use
 - Difficult access to market / multiplier
 - Recognised RAB multiplier
- Opportunities & Threats can also be client specific Examples
 - New processor offering off-take guarantees
 - Spreading of brown streak disease





Cassava Sector - Risks

Key risks	Mitigants	
Crop disease	Using selected planting material and good cropping techniques	
Theft	Plant bitter varieties (less attractive for theft)	
Majority of production is not commercialised (no cash revenues)	Financing through cooperative only based on track record	
Price risk	Financing amount based on market prices	
Quality of end product	Working with certified processors only	





Cassava Sector - Case Study

Case study – Asset finance

- Cooperative with 500 members producing cassava on 50 hectares
- Production about 700 MT fresh tubers/year
- Cost of cassava tubers RWF 50/kg
- Cooperative wants to invest RWF 50 million in processing equipment with capacity of 5 MT/day
- Expected gross margin RWF 25 million/year
- Off-take for 10MT Flour/month at RWF 450/kg from Kigali trader
- Assets for security: office building and savings of RWF 15 million



