



Opportunities for Investment in Commercial Use of Cassava in Uganda

Current status and potential for cassava value-added products

Uganda produces over 5 million tonnes of cassava annually. However, the industrial potential of the crop is not yet fully exploited. Cassava products with significant investment opportunities include; starch, high quality cassava flour and chips for use as raw materials in bakeries, breweries, bioethanol, paperboards, bio-degradable plastics, animal feeds and textiles. Another attractive business opportunity is investment in quality cassava seed production. In Uganda, there is very high demand for certified planting material. Cassava is already widely utilised as a commercial crop in Brazil, Thailand, China, Cambodia, Nigeria, Ghana and Mozambique in a range of applications.

Transformation of the cassava industry in Uganda will require;

- (i) Public-private partnerships,
- (ii) Supportive policies that promote cassava commercialization,
- (iii) Efficient processing technologies and infrastructure,
- (iv) Favourable tax regimes and incentives and
- (v) A functional seed system to feed the industry with reliable supplies of appropriate varieties.

Here we present cassava investment opportunities in Uganda and answers related to frequently asked questions to cassava commercial production and utilization.

Key Investment opportunities

- Cassava starch
- High Quality Cassava Flour
- Breweries
- Bio-ethanol
- Biodegradable packaging materials
- Food industry
- Feeds
- Processing machines
- High quality cassava planting material

Frequently asked questions	Breweries	Cassava starch	High Quality Cassava Flour	Bio-ethanol	Food	High quality cassava planting material	Processing machines
What variety is most suitable?	NAROCASS 1, NASE 3 and NASE 14,	NAROCASS 1, NASE 3 and NASE 14, NASE 19,	NAROCASS 1, NASE 14, NASE 19, and NASE 3	NASE 3, NAROCASS 1	All NASE and NAROCASS series	NASE 3, NASE 14, NASE 19 and NAROCASS 1	
What and where is the market potential?	Cassava beer for the domestic and regional markets.	Industries; textile, breweries, food, adhesives for domestic and regional market. Potential of 80,000MT for domestic and regional market and over 100,000MT for China alone. By products e.g. liquid glucose and dextrin have ready domestic market as sweeteners Cassava biodegradable plastics	Food industry; bakeries, biscuits, breweries, adhesives, paper and pulp, plywood, composite flour. Potential demand of 100,000 MT per year for domestic market alone	Distillers, industrial energy, fuel blends, health and research units, clean energy (special domestic lamps)	Local, domestic and regional markets. Food casings and food packaging	Local, domestic (over 75% of the country) and neighbouring countries. Farmers, local governments, NAADS, UN Agencies, NGOs and cassava processing plant owners. Potential annual demand of over 150,000 bags (UGX 5 Billion)	
What input is required?	Starch and High Quality Cassava Flour (HQFC)	Cassava roots and High Quality Cassava Flour (HQFC)	Fresh cassava roots	Starch and Cellulosic based feedstock from cassava	Quality planting materials. Cassava flour/starch	Quality planting materials, land, labor	
What is the cost of production per unit?	UGX 0.6M/tonne starch UGX 0.4M/tonne HQCF	UGX 0.6M/tonne starch	UGX 0.4M/tonne HQCF	UGX 0.5M/tonne	UGX 0.1M/tonne	UGX 0.3M/acre for hire and/or UGX 1.0-3.0M/acre	- Solar dryers - Flash dryers
What other inputs are required by the investor?	Fermentation materials, water, electricity, cassava processing plants	Water, electricity, starch processing plant	Cassava processing plants, driers	Hydrolysis-related inputs. Distillation and ethanol recovery equipment	Land, labour	Land, labour	
What is required to sustain production & supply?	Reliable and regular supply of starch and HQCF	Reliable and regular fresh cassava roots and HQCF	Reliable and regular supply of cassava roots	Reliable and regular supply of cassava roots	Improved varieties, reliable markets	Improved varieties	
What are socio-economic & cultural issues surrounding this kind of investment?	Religious concerns, fear of cyanogens, food security risks, worrying trends in alcohol consumption	Food security risks, wastes from the plant	None	Food security, high levels of alcohol consumption	None	None	
What kinds of machines are required in some of the key investment areas?	Uganda Breweries Ltd has necessary infrastructure and machinery. Other brewing companies anticipated	Reliable and cheap starch producing machinery is available. Can be fabricated locally or imported from China and India	Machinery available at local fabricating companies.	Local Machinery is available and can be fabricated.	Graters, chippers, extruders, driers (solar and flush driers)	Planting and seed production machinery available on importation	Graters, chippers, extruders, driers (solar and flush driers)