CLAYUCA
Latin American and Caribbean Consortium to Support Cassava Research and Development

Cassava pos-harvest
Cassava flour for animal feeding

CLAYUCA is working in the development of a technology for the production of cassava flour that can be used in animal feeding. This technology has been developed to meet criteria related to competitiveness, efficiency and profitability.

General view of the processing plant

Stages of the process

Cleaning of fresh roots

Chipping and disintegration

Pre drying

Drying, acclimatization and packing

Product

Cassava integal flour

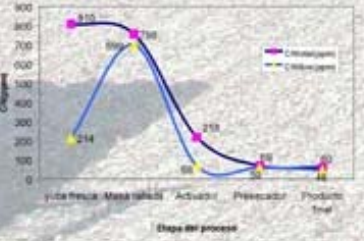
Processing costs

Item	Consumption per flour ton		Unitary value $Col	Cost $Col	
Plant factory model[1]	1	2		1	2
Raw material					
Fresh roots (ton)	2,5	2,5	[5] 80.000	200.000	200.000
Processing costs					
Electric power (kwh)	130	85	150	19.500	12.750
Natural gas m³	70	60	250	17.500	15.000
Maintenance [6]				6.200	2.970
Depreciation [7]				15.350	7.410
Manual labor	7	17		24.300	10.630
			Subtotal	82.850	48.760
			Total production costs [8]	282.850	248.760

[1] **Model 1:** 500 kg/h, 1450 ton flour/year.
Model 2: 5 ton/h, 14500 ton flour/year.
[2] Both models working 300 days per year, three shifts per day.
[5] Price of roots at up processing plant gate.
[6] 4% per year of investment costs.
[7] Calculated over 10 years.
[8] Price of cassava flour at up processing plant gate.

Technical data

Variation of the cyanide content during the process



Proximal analysis of the cassava integral flour

Description	% H b.h	Protein (%)	FC (%)	Ashes (%)	E.E.T. (%)	CN total (ppm)	CN free (ppm)
CM 340-30		2.67	3.96	3.31	0.92		
CM 340-30		2.72	4.01	3.26	0.90		
CM 340-30		2.54	3.82	3.39	0.50		
AVERAGE	**11**	**2.64**	**3.93**	**3.32**	**0.77**	**62**	**57**
MVEN 2		2.68	3.76	3.41	0.68		
MVEN 35		2.50	4.28	3.31	0.72		
MVEN 25		2.74	3.80	3.47	0.80		
AVERAGE	**13**	**2.64**	**3.95**	**3.40**	**0.73**	**60**	**48**

Variation of the moisture content during the process