11th ACA Annual Cashew Conference



A NEW VISION FOR PARTNERSHIPS & INVESTMENTS



Cotonou, Benin September 18-21, 2017

Knowledge sharing. Exposition. Field trips.



Local & regional perspectives for cashew shell and CNSL

Julia Artigas Sancho Fullwell Mill, 20 September 2017







Conventional technologies for cold/hot extraction (screw press) yield...

Sold for export

165,000 - 247,000 XOF/MT, CIF [\$300 - \$450]

20% CNSL

However, prices are volatile

OR

~130 MT/year Per 1000 MT/year RCN capacity

Locally sold as:

- Fuel for industrial burners
 50,000 300,000 XOF/MT [\$90 \$550]
- Raw material for brake lining
- Raw material for paint industry
- Raw material for road layers
- Tar for waterproofing in buildings

80% de-oiled cake





Ready technologies exist (see India, Vietnam)



Local technologies in development Low tech; no need for good quality CNSL





Conventional technologies for cold/hot extraction (screw press) yield...

20% CNSL



Biomass fuel

- Unprocessed, as flakes
- For factory boiler
- For sale to other industries

Per 1000 MT/year RCN capacity ~600 MT/year

80% de-oiled cake

Requires automated feeding

~150 MT/year Similar or higher price vs. wood

- Carbonised + briquetted
- For industrial clients (firewood)
- For households





Additional equipment







Recently developed local technologies



Carbonisers (cashew shell kiln)

- Can treat remaining waste shells or de-oiled cake
- Thermal CNSL recovery : CNSL as by-product
- Modular and easy-to-use
- Yields high-quality charcoal

Gasifiers

- Fed only with cashew shells
- Provides heat to factory boiler
- Up to 1,500 MT RCN/year
- Uses up to 25% of shells
- ROI less than a year for a medium-sized processor

In Benin, gasifier tech has already been implemented in 3 units Its application can reach larger factories



~74 to 130 MT/year 2 x price of wood charcoal

Advantages:

- ✓ Low-tech
- ✓ 100% locally built
- ✓ No need for electricity
- No additional working costs
- Less fumes 🖈
- By-product : charcoal



Thank you

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