

A faint, light gray outline map of the African continent is centered in the background of the slide, showing the borders of various countries.

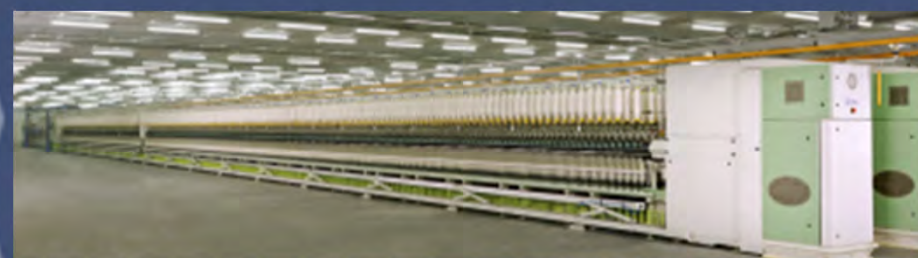
Technology & Machinery for CTA Value Chain: Innovation to Build Competitiveness

**11th Nov 2014
Nairobi.**



Short staple spinning

- Ring Spinning
 - 80% of world's spun yarn
 - Stronger, softer & durable
- Compact spinning
 - Less hairy / fussy
- Open End Spinning
 - Low cost of yarn manufacturing (7 times Faster than ring spinning, Elimination of process)
- Air Jet spinning
 - 2 times faster than OE



Spinning production capacity



Country	Installed spindles	New spindle addition in Year 2013
China	115 million	6 million
India	44 million	2.3 million
Indonesia	11.7 million	750,000
Bangladesh	9.6 million	250,000
Turkey	6.7 million	570,000
Africa	5.15 million (Estimated working – 3 mn spindles)	124,000
World	240 million	11.5 million



Last five years new machinery shipments - Africa

Country	2009	2010	2011	2012	2013	2014 (P)
<i>Africa - Total</i>	<i>33600</i>	<i>93360</i>	<i>20280</i>	<i>59280</i>	<i>124872</i>	<i>85000</i>
Egypt	33600	75024	12000	20160	90192	75000
Morocco			3600	4320	3600	
Ethiopia		13200	3600	10800		
Nigeria			1080			
Kenya						
Tanzania		5040			1080	
South Africa						
Angola				24000	25200	

Cost of Yarn Manufacturing

Ring Spinning - 30s Combed Knitting



Country	Tanzania	India
Raw material (Clean cotton cost)	70 %	66 %
Electric Power	17% @ 0.09 US\$ / Kw hr	10% @ 0.1 US\$/Kw Hr
Man Power	6% @ 100 US\$ / Month	8% @ 220 US\$ / Month
Packing	2%	2%
Spares, Maintenance	3%	2%

-Direct costing Comparison study done with

-Same level of modernization

-Same cotton length (27.5mm)

-Depreciation, Interest & other overheads not included

African Spinners - Challenges



1. Cotton quality (Actual & perceived),
Consistency of quality
2. Modernization (Average of African spinning
machinery : 23 years, Indian : 14 years)
3. Labor productivity (30 to 40% lower)
4. Infrastructure (Ports, Lead time)



African Spinning - SWOT

STRENGTHS	WEAKNESS
Cotton supply	Cotton Quality
Man power at Competitive price	Modernization
Electric power	Productivity
Opportunities	Threats
High Disposable income	Increasing Automation
Trade treaties	Asian Peers

Mantra for success of Spinning mill



- **Marketable quality**
- **Maximum utilization of resources**
- **Higher productivity**



Thank you!

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