Investing in the African Forestry Sector: Successes and Challenges for a Private Equity Platform
Outline

1. ASFF I Platform
2. Macro Picture: More Forestry Investment is Needed in Africa
3. Challenges in Attracting Institutional Capital to African Forestry
4. What To Do?
ASFF Platform

Forestry Assets
50,000 ha eucalyptus plantations
56,000 ha pine plantations
8,000 ha teak plantations
568,000 ha natural forest concessions
682,000 ha productive timberland in total, all sustainably managed
(99% of the area w/ FSC certification)

568,000 ha natural forest concession and industrial assets in Gabon (*)

28,000 ha of eucalyptus and pine in South Africa

50,000 ha of pine, two sawmills and two biomass energy facilities in South Africa

8,000 ha of teak and sawmill in Tanzania

Minority Partner with IWC in 7,500 ha of pine and eucalyptus in Uganda (*)

22,000 ha of eucalyptus, sawmill, and mining timber mill in Swaziland

(*) ASFF holds a significant minority position in Global Woods and CBG and a large majority position in all the other portfolio assets.
ASFF: 3rd largest African Private Plantation Owner
(SSA Plantation Universe: 2m ha private, 2m ha public and 1m ha small-holders)

Largest Private Plantation Owners in Africa by Specie (in Hectares)

Source: CAP Proprietary Data and Estimates
ASFF: Largest Source of Plantation Wood for Africa

(ASFF Harvest of 2 mill. m³/year ~ 5% of total SSA harvest from plantations)

Plantation Harvest for African End-Markets in 2016 (m³)

1.8 mill m³, or ~ 90% of ASFF’s 2 mill. m³ total harvest was for end markets in Africa

Source: CAP Proprietary Data and Estimates
ASFF Financial Results

ASFF I Portfolio Revenue (in ZAR mill.)

- Acquired revenue (56%)
- Organic Growth (44%)

ASFF I Portfolio EBITDA (in ZAR mill)

- Acquired EBITDA (10%)
- Organic Growth (90%)

ASFF I Portfolio Revenue (in USD mill.)

- Acquired Revenue (88%)
- Organic Growth (12%)

ASFF I Portfolio EBITDA (in USD mill.)

- Acquired EBITDA (18%)
- Organic Growth (82%)

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Development Impact of ASFF I: 2016

Plantations: 110,000 ha
Natural Forest: 568,000 ha

Sustainable Harvest 2.0 m m³

Markets

- Housing (Sawlogs)
- Infrastructure (Poles)
- Mining (Mining Timber)
- Energy (Biomass)
- Other (Pulp, Panels, Etc.)

Revenue

- 720,000 poles, providing 36,000 km of electricity lines
- ~8,900 jobs supported
- Supporting over 3,000 SME firms

- Retained Earnings (5%)
- Taxes Paid (17%)
- Other Expenses, including SMF & ESG (17%)
- CapEx and Investment (10%)
- SME Procurement (43%)
- Wages and Salaries (19%)

Other Expenses, including SMF & ESG (17%)

SME Procurement (43%)

~800 SME firms creating jobs downstream

Doors, window frames, roofing trusses, lumber, and furniture

Logs and wood products sold to ~800 SME firms creating jobs downstream

(*) The total expenditures for CapEx and Sustainable Management for 2016 are estimates
Compared with the universe of registered CDM projects (see graph), the projected investment cost relative to the projected average annual carbon sequestration/offset is lower for forestry and biomass steam investments than for the majority of CDM project types.

* Sources: CAP projections and CDM Database of all Registered Projects.
Africa Needs More Wood: Stagnant Supply Will Not Meet Increasing Demand

Divergent Demand/Supply Dynamics

**Demand**: Strong industrial wood demand (~5% p.a.) in addition to steady fuelwood demand (2% p.a.)

**Supply**: Natural forest stock fixed and only small growth from plantations (~1% per year) due to lack of investment

Community-based plantations represent an untapped opportunity to increase supply

This growing supply gap is leading to higher prices, more imports and increased deforestation

Sources of Wood Supply in Africa (million m³)
How will supply cover demand growth of 2.6% p.a.?

- Natural Forests
- Industrial Plantations (+3% p.a.)
- Small-Holder Tree Farms
- Supply Gap (+10% p.a.)

Source: Food and Agricultural Organization, Indufor, and CAP Estimates
Growing Demand for Industrial Roundwood Already Exceeds Stagnant Supply

Robust Supply-Demand Fundamentals in place

**Demand**: Demographics and urbanization lead to strong demand for industrial wood (~5% p.a.), in particular for basic building materials.

**Supply**: The combination of low productivity for existing plantations and limited greenfield investments imply a stagnant supply of IRW from both plantations and the fixed natural forest stock.

**Trade**: An accelerating trade deficit is likely for the foreseeable future.

Source: Food and Agricultural Organization, Indufor, and CAP Estimates
Sub-Saharan Africa Increasingly Imports from the Rest of the World

Sources of SSA Solid Wood Imports (USD million)

- Total Import CAGR = 10.8%
- Bilateral SSA = 5.5%
- Import ROW = 14.4%
- Rest of the World exc. China: CAGR = 11%
- South Africa and Swaziland: CAGR = 7%
- Bilateral within SSA excl. SA & Swazi: CAGR = 4%

% indicates proportion of 2015 Imports

Source: ITC
Urbanization & Growth are Driving Demand for Building Products

SSA Imports of Wood Products: Excluding SSA Bilateral Trade (USD mm)

Total CAGR: 14.4%

% indicates CAGR since 2001

- All Other: 8%
- Particleboard: 17%
- Poles: 21%
- Joinery: 24%
- MDF: 21%
- Plywood: 20%
- Lumber: 10%

Source: ITC
$50b of Global TIMO Capital... Very Little Coming to Africa

Disequilibrium:
Africa's Share of Global Forestry

- Industrial Wood Consumption: 5%
- Total Wood Consumption: 21%
- Underutilized Arable Land: 50%
- Investments in Forestry: 1%

Mismatch between wood demand and investment capital

Why such disequilibrium?
1. Country risk (actual & perceived)
2. Currency risk
3. Land tenure insecurity
4. Reputation risk
5. Poor infrastructure
6. Limited market intelligence & access
7. Lack of downstream channels
8. Environmental, Social & Governance issues
Why Do Institutional Investors Choose Forestry? Key Portfolio Characteristics of the Asset Class

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Where Will African Forestry Fit in Institutional Portfolios?  
(or, “Why shouldn’t I invest in a Nigerian cement factory?”)

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<th>African Forestry Sector?</th>
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| Biological Growth                          | Excellent growth potential...  
Lots of work to do on genetic improvement |
| History of solid returns with low volatility (see NCREIF) | Unproven returns;  
higher risk profile leads to higher volatility |
| Relatively predictable cash flows          | Negative cash flows?  
High discount rates challenging for greenfield forestry |
| Low Correlation to Other Asset Classes     | Downstream integration increases correlation |
| (USD) Inflation Hedge                      | Currency risk |
| Ability to store value on the stump...     | Downstream integration reduces flexibility;  
Some high value products (e.g. poles) can’t wait |
| Harvest when markets are strong            | Risk profile is much more equity-like  
(inefficient markets, poor infrastructure, management capacity, stakeholder risk, fire risk, political risk, etc.) |
| Attractive Risk-Return Profile with Fixed Income Characteristics | |

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Attracting More Capital to African Forestry

- Build a track record of success
  - Exits, Returns, Cashflow
- Link Forests to Markets... Downstream Processing
- Build Human Capital
- Better Market Data... Prove the Macro Picture
- Greenfield Plantations May Require Concessional Financing
- Do More with Brownfield Assets... Public-Private Partnerships
Thank You