Investing in Forest Plantations in Africa
African Forestry Investment Conference
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Indufor in Brief

- Indufor founded in 1980
- Independent, staff owned
- Provides world-class advisory services in forest and forest industry investments and development
- Serves both private and public sector clients
- Offices in
  - Helsinki, Finland (HQ)
  - Auckland, New Zealand
  - Melbourne, Australia
  - Washington DC, USA
- Collaborative partnership with Winniwood Consulting, Ghana
Indufor in Africa

• Due diligence and valuations
• Feasibility studies
• Sustainability assessments
• Strategic advice in forest and wood processing investments
• High-level reviews of government strategies
• Development of private forestry
1. **Rationale for Investing in African Plantation Forestry**
   1. Economic Growth
   2. Trends in African Forest Resources
   3. Trends of Investments in African Forestry
   4. Favorable Mega-Trends for Forest Industry and Plantation Investments

2. **Conditions for Successful Investment in Forest Plantations and Industry Value Chains**
   1. Market Access
   2. Operational Capacity
   3. Other Enabling Conditions

3. **Take-home Messages**
1. Rationale for Investing in African Plantation Forestry

1. Economic Growth (1/3)

<table>
<thead>
<tr>
<th>Mature markets</th>
<th>Selected African countries</th>
<th>2011-2016</th>
<th>GDP Growth (%/a)</th>
<th>2011-2016</th>
<th>GDP Growth (%/a)</th>
</tr>
</thead>
<tbody>
<tr>
<td>USA</td>
<td>Ethiopia</td>
<td></td>
<td>2.2</td>
<td></td>
<td>8.1</td>
</tr>
<tr>
<td>Germany, France</td>
<td>Mozambique</td>
<td></td>
<td>2.1</td>
<td></td>
<td>7.7</td>
</tr>
<tr>
<td>France</td>
<td>Tanzania</td>
<td></td>
<td>2.1</td>
<td></td>
<td>7.2</td>
</tr>
<tr>
<td>Australia</td>
<td>Ghana</td>
<td></td>
<td>3.2</td>
<td></td>
<td>7.0</td>
</tr>
<tr>
<td></td>
<td>Nigeria</td>
<td></td>
<td></td>
<td></td>
<td>6.8</td>
</tr>
</tbody>
</table>

Several Sub-Saharan countries are growing faster than mature markets.

In some countries the economies have grown for more than a decade. The growth is expected to continue at 6-9% per year.
1. Rationale for Investing in African Plantation Forestry

1. Economic Growth (2/3)

GDP is not all that matters

The social well-being is improving in many countries over the past 15 years measured by UNDP Human Development Index.

The HDI is a summary measure of average achievement of key human development indicators – life expectancy, education and gross national income per capita.

The greener the colour the more the index has improved over the past 15 years; vice versa with red colour.
1. Rationale for Investing in African Plantation Forestry

1. Economic Growth (3/3)

Reality on the ground shows that consumption patterns are changing and increasing as African populations become more developed, with countries like Ghana, South Africa, Nigeria and Ivory Coast demonstrating strong growth in HDI.

Source: World Bank

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1. Rationale for Investing in African Plantation Forestry

2. Trends in African Forest Resources (1/3)

- Natural forest cover decreasing and degrading
- Limited industrial infrastructure
- Limited access to markets
- Greenfield plantations not profitable in short-term
- Not enough forest plantations to meet the demand
- Unsustainable utilization of natural forest resources

Projected Demand and Supply for Industrial Roundwood in Africa

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1. Rationale for Investing in African Plantation Forestry
2. Trends in African Forest Resources (2/3)

Demand Forecast - Sawnwood

- West African population growth average of 2.5 - 3.5% per annum
- If wood consumption per capita were to stay the same over the next two decades:

<table>
<thead>
<tr>
<th></th>
<th>Current Estimated Annual Domestic Consumption (m3)</th>
<th>2016 Population</th>
<th>Per capita wood consumption</th>
<th>WB Population Forecast by 2035</th>
<th>Likely Future Demand (m3) by 2035</th>
<th>2016-2035 likely sawnwood demand increase (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ghana</td>
<td>600,000</td>
<td>28,000,000</td>
<td>0.03</td>
<td>38,000,000</td>
<td>1,140,000</td>
<td>100%</td>
</tr>
<tr>
<td>I. Coast</td>
<td>430,000</td>
<td>23,000,000</td>
<td>0.02</td>
<td>36,000,000</td>
<td>720,000</td>
<td>68%</td>
</tr>
<tr>
<td>Nigeria</td>
<td>2,400,000</td>
<td>182,000,000</td>
<td>0.02</td>
<td>290,000,000</td>
<td>5,800,000</td>
<td>142%</td>
</tr>
<tr>
<td>S. Leone</td>
<td>200,000</td>
<td>7,000,000</td>
<td>0.03</td>
<td>9,400,000</td>
<td>282,000</td>
<td>41%</td>
</tr>
<tr>
<td>Totals</td>
<td>3,630,000</td>
<td>240,000,000</td>
<td>0.03</td>
<td>373,400,000</td>
<td>7,942,000</td>
<td>118%</td>
</tr>
</tbody>
</table>

Question: *How will West Africa meet this growing demand?*
1. Rationale for Investing in African Plantation Forestry
2. Trends in African Forest Resources (3/3)

• Remaining natural forests are increasingly being protected through REDD+ initiatives and are incapable of meeting future growing demand.

• In the short term, imports will be used to meet shortfalls as plantation assets develop in the region.

• Africa, in particular sub-saharan West Africa, will consume more amounts of wood due to strong GDP growth, good HDI Growth, growing populations and improving economic conditions. Key products needed for economic development will include:
  ✓ Sawnwood
  ✓ Veneers
  ✓ Plywood
  ✓ Joinery, Mouldings and Furniture
  ✓ Internal and External Doors (currently imported)
  ✓ Electricity Poles – Teak, Eucalyptus/Pine (currently imported)
  ✓ Panel Products - MDF, Hardboard, OSB – currently imported
  ✓ Engineered wood products – Glulam and Finger-jointed products
1. Rationale for Investing in African Plantation Forestry

3. Trends in Investments to African Forestry

Source: Economic Commission for Latin America and the Caribbean (ECLAC), fDi Markets, Indufor Plantation Databank, OECD CRS.
1. Rationale for Investing in African Plantation Forestry

4. Favorable Mega-Trends for Forest Industry and Plantation Investments

- **Demand drivers**
  - Demographics
  - Urbanization
  - Economic growth
  - Greener economies
  - Un-renewables to renewables

- **Supply drivers**
  - Available land
  - Favourable land prices
  - Competitive timber prices
  - Increasing demand of forest products

- **Growing Forest Industry Ecosystem**
  Gradual creation of opportunities for plantation forest and industry investments

- **Enabling conditions**
  - Market access
  - Operational capacity
  - Supportive financial, institutional, political, and legislative instruments
2. Conditions for Successful Investment in Forest Plantations and Industry Value Chains

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2. Conditions for Successful Investment in Forest Plantations and Industry Value Chains
1. Market Access (1/2)

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**Industrial infrastructure**
- Transport networks
- Value added processing technologies

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Forest Products → Industrial infrastructure → Markets

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2. Conditions for Successful Investment in Forest Plantations and Industry Value Chains

1. Market Access (2/2)

Good industrial infrastructure is essential for successful forestry investment

- Logistic infrastructure enables cost-efficient construction and transportation of raw-materials and goods
- Application of proper industrial processing technologies for value-added production
- Integration to supply-chains and markets
2. Conditions for Successful Investment in Forest Plantations and Industry Value Chains

2. Operational Capacity (1/3)

Operational Capacity

- Human resources and management capacity
- Sufficient asset base and land
- Competitive business model and cost structure
- Modern technologies
2. Conditions for Successful Investment in Forest Plantations and Industry Value Chains

2. Operational Capacity (2/3) - Management capacity

Competitive management capacity is critical for long-term success

International expertise largely present, but local, experienced plantation managers in short supply

- Brazil, Uruguay, Chile, South Africa

Operative Managers need to be located on site; plantations often in remote rural areas

- Ensuring staff commitment and low staff turnover in early years critical

- High overheads

➢ Local capacity building and training for local officers to take-over operative management in the long-term
2. Conditions for Successful Investment in Forest Plantations and Industry Value Chains

2. Operational Capacity (3/3) – Sufficient asset base and available land

Well managed and performing asset enables competitiveness of operations

- Efficient use of raw material and available technologies – there’s no waste in forest
- Benefits of scale
- Secure land availability considering scaling-up of the operations
- Smallholders should be integrated into value chains
  - Tree growers associations
  - Outgrower schemes
2. Conditions for Successful Investment in Forest Plantations and Industry Value Chains

3. Other Enabling Conditions (1/2) - Appropriate Financial Instruments

Reaching operational maturity takes time in greenfield plantations

- Find & develop the best genetic planting material for the site
- Find & develop the best management regimes for the site
- Develop local staff capacity
- Adjust and refine business model and strategies, etc.

➢ May lead to optimistic business models for attracting investors
➢ Innovative "patient" capital is needed
2. Conditions for Successful Investment in Forest Plantations and Industry Value Chains
3. Other Enabling Conditions (2/2)

Land ownership
- Local community land rights
- Concession agreements & benefit sharing

Legal and political conditions
- Political atmosphere for foreign investments - restrictions or incentives?
- Private/Public Partnerships

Environmental and climatic conditions
- Now and in the future
3. Take-home Messages (1/3)

- Global megatrends, regional demand and diminishing natural forests call for investments in forest plantations and establishment of new and/or upgrading of wood processing industries

- Existing natural forests are increasingly being protected and are incapable of meeting current and future demand for wood products

- Plantation establishment needs to accelerate in many parts of Africa

- “Patient” capital is required to support and accelerate plantation development in Africa
3. Take-home Messages (2/3)

- Forest plantations and associated processing industries are important vehicles to improve living standards, create employment and reduce poverty

- Early sharing and transfer of modern plantation establishment and management best practices to locals is essential

- Operating environments are rapidly evolving in many African countries with increasingly emerging improved governance and private/public partnerships

➤ Stakeholders in forest investments have many good reasons to follow Africa closely and take actions
3. Take-home Messages (3/3)

The key question is how to **manage and mitigate** the unique risks

- Application and development of appropriate technology, scale and logistics
- Investments to downstream to secure market access
- Commitment on national and local levels
  - Evidence of good performance in Africa is emerging