Unlocking investments for New Forests for Africa – Sustainable Forest Management, Conservation and the need for dedicated forest plantations in Ghana

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Company Introduction

Forest Resource Management in Ghana

Growing role of timber plantations and FLR in Ghana

Examples of plantations and FLR we worked on in Ghana
  - Form Ghana integrated Teak & Indigenous plantations
  - Tain II forest landscape restoration programme
  - Shea landscape restoration

Conclusions and recommendations
Who we are

Form International B.V.

- Worldwide services in forestry and landscape restoration engineering, advisory and project management
- 25+ years experience

Principle elements of company’s vision

- reforest degraded forest landscapes
- benefits for local communities
- restoring vital environmental services
- economically viable business model

Expertise in:
- Climate investments
- Reforestation
- Forest Landscape Restoration
- Sustainable Forest Management
Form and SFI Group of companies

- Group of companies covers Investment, Management, Technical Assistance, Projects and Advisory Services
- Form International since 1993
- Sustainable Forestry Investments since 2009
  - 30,000 ha degraded land
  - 17,000 ha restored
  - 2500 staff in 3 countries (NL, GH, TZ)
Forest Resource Management in Ghana

- Forest cover < 5 Million hectares (Ghana FIP)
  - Forest Reserves 1.6 Million hectares
  - Forest and wildlife conservation areas 16.2% of Ghana land area
- Annual Allowable Cut = 2 Million m³
- Timber extraction 3.7 Million m³/year (1.8 Million m³ illegal)
- Fuelwood and charcoal estimated 30 Million m³/year
- Annual deforestation 2%
- Drivers of deforestation:
  - agricultural expansion 50%)
  - wood harvesting (35%),
  - population and development pressures (10%),
  - mining and mineral exploitation (5%)

*Source of figures: Ghana Forest Investment Program*
Formal logging sector options to supply from natural forest

- On reserve: Timber Utilization Contract, regulated timber extraction under management plans and social responsibility agreements. Some operators are certified (FSC Controlled Wood ~250,000 ha).
- Off reserve: Timber Utilization Contract, regulated timber extraction with social responsibility agreements
- Salvage Permit from areas developed into other uses (roads, hydrodams)
- Timber Utilization Permit for small scale community purposes

- Formal sectors can provide sustainable and legal sources of wood for energy from residues from timber extraction and processing.
- But natural forest resources are declining and traditional timber businesses in Ghana struggle
- Natural forests increasingly destined towards conservation of biodiversity (flora and fauna) and carbon (REDD+, Ghana NDC)
- Plantations needed to substitute declining produce from natural forests
Growing importance of plantation timber in Ghana

- Timber export volume from mainly natural forest **55% reduced** in 12 years
- Plantation timber almost at 50% of total export volume and is expected to further increase its share
- For wood energy we will see the same trend towards plantations

Source: Ghana Forestry Commission
How wood energy fits with timber plantations for in Ghana

• ~93% of plantation timber is teak (Gmelina and Cedrela ~7%)
• Main products
  • Billets
  • Rough squares
  • Poles (domestic market)
  • Saw logs
• No secondary or tertiary processing (yet) in Ghana
• Cascade use of wood, best and optimal use first, also from a financial point of view (energy wood prices low)
• Residue from forest plantations and processing is substantial: could be used for e.g. fire wood, charcoal or pellets (biofuel)
Example 1: Form Ghana Ltd.

- Largest private teak company in Africa (20k ha land, 10k ha planted)
- National PPP concept developed, 20% benefit sharing
- Conservation and restoration of native forest & trees
- Intercropping with >500 farmers
- Only company in Africa to attract FIP climate funds
- Landscape restoration around plantations 3000 ha
History and Milestones

- Commercial reforestation and restoration of degraded Forest Reserves
- Initiative of **Form International B.V.**, since 2009 subsidiary of **Sustainable Forestry Investments B.V.**
- 18,000 ha under management, 50 year land lease (renewable)
- >1,200 staff employed
- Sales of FSC certified Teak and Voluntary Carbon Credits (VCS)
- Blended finance

Timeline:
- **2001**: Establishment and start reforestation
  - **Form Ghana Ltd.**
- **2007**: Pilot plantation
- **2010**: FSC certification
- **2013**: VCS certification (carbon)
- **2017**: Start landmark FLR project TAIN II
- **2018**: 10,000 ha planted
  - Largest private Teak plantation in Africa
Form Ghana Plantation Areas
Degraded Forest Reserve Asubima Central Ghana before project in 2003
Forest Reserve 2018

>10,000 ha of Teak plantations - 13 million trees planted – 10% indigenous tree species
Tain II Landscape Restoration Programme
Forestry plantation + buffer zone agroforestry
Timber-Cash crops-Food security-Conservation
Pilot 2017-2021: 3000 ha, 200 farmers
Long term vision: 100,000 ha, 10,000 farmers
Intervention strategy

• Improve **governance**: landscape governance board and working groups
• Promote **diversified agroforestry value chain development** for improved, sustainable land use and higher farmer income
• **Ecological restoration** by reforestation with mixed local species
• **Community fire management** to safeguard agroforestry investments and halt land degradation
Achievements

Current programme phase: 2017 – 2021

✓ Innovative mixed agroforestry models designed
✓ Governance board operational
✓ Changed local bylaws for fire use and free roaming cattle
✓ +200 farmers in project
✓ 1,200 hectares under agreement
✓ > 400 hectares of agroforestry systems established
✓ Market linkage and value chain development Maize and Cashew
✓ 6,000 ha community fire management programme (6 communities, 7 fire squads)
✓ 52 km roads and fire belts on community land established
✓ 650 hectares natural forest restoration
Community Fire Management Project

Fire season 2018/2019 – RESULTS

FIRE FREQUENCY MAP DECEMBER - MARCH 2018

F1, F2, F3, F4, F5, F6, F7, F8, F9, F10, F11, F12, F13, F14, F15, F16

FIRE FREQUENCY MAP DECEMBER - MARCH 2019

F1, F2, F3, F4, F5, F6, F7, F8, F9, F10, F11, F12, F13, F14, F15, F16

FIRE BLOCK BOUNDARIES

UNCONTROLLED FIRES

Date: 4/2/2019  Author: OLUWELABOTHEIY

Date: 4/4/2019  Author: Oluweluabotheiy
Next steps

• Continue tree plantation development, agroforestry and promoting trees on farms across the landscape

• Upscale fire programme

• Pilot interventions to farmers to plant and monetize trees for timber (Gmelina, Teak)
  • Focus more on fast growing trees
  • Assist farmers with financial support, TA and intercropping
  • Assist with clear land tenure arrangements between farmer and land owner

• Lower grade wood produce suitable for firewood and charcoal
Example 2: Shea Landscape Restoration

- 55,000 seedlings raised: 35,000 shea seedlings + 20,000 other savannah species
- 2 tree nurseries for savannah tree species
- >3000 women and men in 40 communities trained on Improved Parkland Management
- >6,000 hectares supported on improved management
- 13,000 seedlings planted by 500 farmers, 2 companies, 1 NGO, 1 donor project
- Partners: A Rocha Ghana, IUCN Netherlands, Global Shea Alliance
Lessons learned for shea landscape restoration

• Community awareness and buy-in is there, including paramountcy
• Technical feasibility proven
• Critical to manage fire and cattle risk
• Tailor restoration and conservation interventions to the natural resource state: e.g. intensive planting, enrichment planting, farm boundary planting, natural regeneration, conserving.
• Tree planting & regeneration not feasible in isolation → link to other economic activities in the landscape: shea value chain, agriculture, charcoal/firewood, carbon finance
• Protecting and restoring soil quality and water sources for food production through tree cover is key
• Landscape approach essential
Next steps

• Opportunities to translate experience and lessons learned into new REDD+ and FLR programmes for the Savannah zone

• Showcase an integrated intervention model with:
  • Tree plantation development
  • Assisted natural regeneration
  • Fire management
  • Alternative livelihoods (jobs, improved agriculture and agribusiness, organic shea, beekeeping etc.)
  • Regulated charcoal production and value chains
  • With the right enabling conditions: governance, land access, benefit sharing, inclusive development
Conclusions and recommendations

- The future of timber and wood energy supply in Ghana and most West African countries depends on plantations, both for export and domestic consumption.
- **Invest and plant more!** Ghana needs dramatically more plantations to substitute 1.8 Million m3 of timber and 30 Million m3 of energy wood unsustainably harvested each year.
- PPP and blended finance examples available in Ghana to learn from, replicate and upscale.
- Change the mindset, reduce reliance on natural forest: they will increasingly move to conservation of biodiversity and carbon (REDD+, NDC).
- Wood energy is often a by-product for high quality plantations.
- Plantations specifically for energy wood make sense for rural energy supply, but ROI is low, which warrants public sector support.
- Government of Ghana, and other public sector support needed by providing incentives (e.g. subsidies, TA, fiscal), support new projects and R&D.
Q&A

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