

Africa Sustainable
Forestry Fund



CRITERION

AFRICA PARTNERS

BUILDING A LEGACY. MAKING AN ACTIVE IMPACT ON AFRICAN FORESTRY.





THE JOURNEY



1. Fund Overview



2. Addressing the Supply Gap



3. Economic Impact



4. Environmental Impact



5. Social Impact



6. Get in Touch



We believe in building profitable forestry enterprises

in Sub-Saharan Africa to help feed the growing wood supply gap within Africa, while **conserving natural forests, enhancing biodiversity, and improving the lives** of our workers and community stakeholders.

Africa Sustainable Forestry Fund (ASFF) is a \$160 million fund raised in 2010 with eight portfolio companies currently operating in South Africa, eSwatini, Tanzania, Uganda and Gabon. It directly employs over 3,500 people, with salary payments amounting to \$29 million each year. An additional 5,000 people are employed through SME contractors.

Since 2010, we have strived to set a benchmark in sustainable forestry management, striking a balance between meeting the needs of society and industry while preserving forest health.

The Fund's portfolio reaches across the whole forestry value chain: 675,191 ha of productive timberland (of which 568,543 ha is natural forest) including eucalyptus, pine, teak, and tropical timber, as well as sawmills, timber processing and biomass energy plants.

We add value through:

FUND OVERVIEW

1. Best in class silviculture, environmental and social practices

Sustainable forestry is forward thinking forestry

ADDRESSING THE SUPPLY GAP

2. Turning challenges into opportunities

Supplying wood to fuel Africa's growth

ECONOMIC IMPACT

3. Playing a transformative role in the African economy

Through tax revenues, job creation, training and SME development

ENVIRONMENTAL IMPACT

4. Proactive measures to protect climate and biodiversity

Wetland and forest conservation, anti-poaching and carbon sequestration

SOCIAL IMPACT

5. Strategically engaging with local stakeholders

Building shared value with communities through proactive communication and strategic local investments



1. ABOUT THE FUND

Best in class silviculture, environmental and social practices

Sustainable forestry
is forward thinking
forestry





Africa Sustainable Forestry Fund (ASFF)

is the first dedicated forestry fund in Africa, and has been in operation since 2010.

ASFF AT A GLANCE

\$160 million fund

Team with 125 years collective experience

8 portfolio companies

3,500 people are directly employed

\$29 million in annual salary payments

\$54 million of goods and services procured from contractors and other SMEs, employing another 5,100 people

1.6 million cubic meters of sustainably harvested wood in 2018

65,723 hectares of plantation conservation areas

568,543 hectares of natural forests sustainably managed

Serving customers in Sub-Saharan Africa, Europe and Asia

**Annual 2018 figures*

ASFF is managed by Criterion Africa Partners (CAP)

The largest private investor in Africa's sustainable forestry sector

CAP is an employee-owned investment management company that focuses exclusively on timber assets and downstream processing in Sub-Saharan Africa. The Grantham Foundation for the Protection of the Environment is a strategic partner in CAP.

Our team has worked together since 2010 with no staff turnover, offering over 125 years of combined experience in evaluating, acquiring and improving the management of timber assets. Best in class environmental, social, and governance (ESG) practices and Forest Stewardship Council® (FSC®) principles are core components of the investment strategy.





Our portfolio stretches across five African countries



UGANDA Global Woods

- 7,000 hectares pine
- 1,400 hectares eucalyptus
- 3,700 hectares conservation
- Sawn timber, poles, pine resin, bioenergy
- Investment date: 2015



GABON Compagnie des Bois du Gabon (CBG)

- 568,543 hectares tropical timber and conservation
- Hardwood lumber and veneers
- Investment date: 2016



SOUTH AFRICA MTO Group*

- 40,000 hectares pine plantations
- 21,000 hectares eucalyptus
- 30,000 hectares conservation
- Sawlogs, lumber, plywood, pole treatment, bioenergy
- Investment dates: 2010, 2013

*MTO Group includes MTO Cape, MTO Lowveld, Ramanas and Imvelo.



TANZANIA Kilombero Valley Teak Company

- 8,000 hectares teak
- 20,000 hectares conservation
- Sawlogs, teak lumber, specialty teak products
- Investment date: 2011



eSWATINI Peak Timbers

- 18,000 hectares eucalyptus
- 11,000 hectares conservation
- Sawlogs, pulpwood, mining timbers, lumber, utility poles
- Investment date: 2012



2. ADDRESSING THE SUPPLY GAP

Turning challenges into opportunities

Supplying wood to fuel Africa's growth





Africa is facing a looming shortage of wood.

The demand for wood in Africa could triple by 2050, driven by population growth and urbanization.

This creates a gaping supply gap, as illustrated in this graph below:

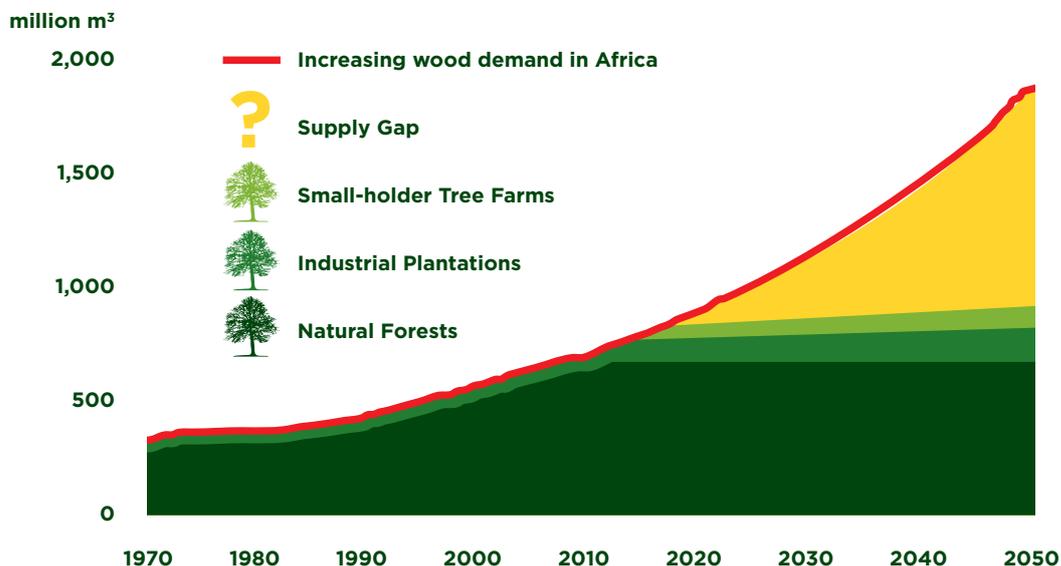
DID YOU KNOW?
The number of people in Africa relying on fuel wood and charcoal will increase by 40% to nearly one billion people by 2030.

This will drive up domestic prices and imports,

increase the degradation and deforestation of forests and natural woodlands, and hamper sustainable economic development.

As Africa's development accelerates, the construction of housing and infrastructure increases the requirements for timber. The construction sector requires structural timber and scaffolding. Agriculture and mining industries utilize wooden fence poles and structural supports, while consumer goods are transported on wooden pallets and crates, and utility poles are required as the backbone of electricity grids.

Sources of Wood Supply in Africa





To address this shortage

CAP invests in companies operating across the forestry value chain rather than focusing solely on growing trees. We acquire and develop assets in three core areas:



1.

Optimizing timber plantations

Despite long-term growth forecasts for timber products, capital investment into plantations in Sub-Saharan Africa remains low. Limited information and capital have created a highly fragmented market.

CAP creates value at the portfolio company level by **improving forest resource management and productivity** and matching harvested wood with appropriate manufacturing to supply markets where demand and profit margins are compelling.

2.

Manufacturing wood products

In Africa, demand for basic wood products – such as lumber, plywood, utility poles and composite panels – is driven by population growth, urbanization, and the emerging middle class.

Many plantations are unable to capitalize on this demand and **CAP endeavors to link them to end markets** through adequate manufacturing capacity.

3.

Producing biomass energy

Woody biomass will continue to replace fossil fuels in energy intensive industries in Africa. In food processing, manufacturing, and agriculture, biomass produces high quality steam and electricity for blue-chip customers to reduce their costs and environmental impact.

CAP is developing a portfolio of biomass energy projects with long-term off-take agreements with some of the most prominent companies in Sub-Saharan Africa.



CAP is increasing local production of high margin forest products

The aim is to reduce Africa's nearly \$1 billion of annual imports from Asia and Latin America, thereby strengthening local economies. Our sustainable harvest of wood supports:



Timber

for building and housing



Plywood and veneers

for furniture and construction



Utility poles

for the electricity grid



Fencing poles

for agriculture



Biomass energy

replacing fossil fuels



Structural supports

for the mining industry

Replacing fossil fuels with biomass, reducing CO₂ emissions

The forestry business generates large volumes of wood waste in its forestry and sawmill operations. Converting wood waste into valuable products such as industrial steam and electricity addresses an environmental challenge while also improving company profitability.

CAP helped portfolio company MTO

to identify and implement a number of projects, which displaced coal and fuel oil with biomass as an energy source in the production of steam and electricity.

Power generated from wood chips and sawdust

Previously, wood chips and sawdust at two of its mills were building up, creating a serious fire risk. Power generated from these products is now used on-site by the MTO George sawmill (with a small amount of surplus being sold to the local municipality) and steam sold to a textile plant in George.

Biomass fuel from sawmills

MTO also entered into an agreement with a local dairy to construct a biomass boiler on its premises and **supply sufficient biomass fuel from one of its sawmills**. This displaced approximately 90% of the heavy fuel oil demand of the dairy with sustainably produced biomass fuel. The total net carbon emissions reductions of these projects are approximately 20,000 tons per year.

A BETTER WAY: ENERGY EFFICIENT CHARCOAL PRODUCTION

In recognition of the fact that nearly 3 million hectares of forests in Africa are degraded/deforested for household cooking, CAP has developed robust, efficient and cheap retort kilns that produce a ton of charcoal with 60-80% less wood than traditional kilns.



3. ECONOMIC IMPACT

Playing a transformative role in the African economy

Through tax revenues, job creation, training and SME development



Driving economic growth and job creation

The forestry sector channels a large portion of its revenue to the countries and communities in which it operates in the form of salaries, procurement, taxes, and community investments. In remote and rural areas where few other opportunities exist, forestry operations, sawmills, and associated processing facilities are drivers of economic growth and job creation.

Here is a snapshot of the economic impact of ASFF portfolio companies:



Taxes, local procurement and salaries paid.

**Figures from 2018*

**Taxes:
\$9,907,687**



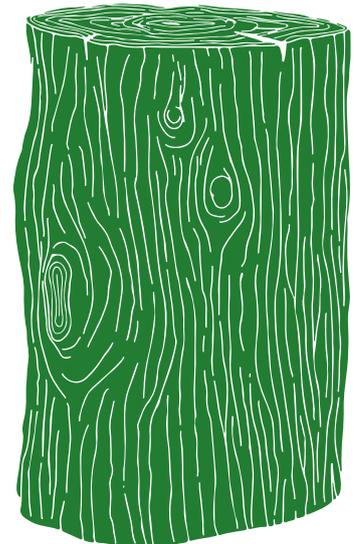
- MTO Group (\$5,053,115)
- KVTC (\$670,000)
- Peak Timbers (\$1,241,288)
- Global Woods (\$259,464)
- CBG (\$2,683,820)

**Salaries:
\$28,931,316**



- MTO Group (\$16,218,538)
- KVTC (\$1,256,940)
- Peak Timbers (\$1,387,318)
- Global Woods (\$750,152)
- CBG (\$9,318,368)

**Local procurement:
\$54,411,715**



- MTO Group (\$25,804,224)
- KVTC (\$2,772,000)
- Peak Timbers (\$20,146,109)
- Global Woods (\$1,043,556)
- CBG (\$4,645,826)



1. TAX REVENUES FOR LOCAL AND NATIONAL GOVERNMENTS

In the five host countries where ASFF operates, we paid \$9.9 million in taxes in the last year and generated FX earnings of about \$50 million for Gabon, Tanzania, eSwatini and South Africa. These taxes have helped finance national, regional, and local government priorities.



2. JOB CREATION AND WAGES

\$29 million is spent on salary payments each year. Through our portfolio companies we provide around 3,500 jobs in regions with otherwise high unemployment, and where approximately 70% of the population is tied to subsistence farming and many live below the poverty level. Another 5,100 people are employed by contractors. These employees benefit from wages and benefits, training and skills development, and in many cases, nutritious meals, and even accommodation.

“In Africa, each job often supports an extended family of 5-10 people.”



3. SKILLS DEVELOPMENT, TRAINING AND HEALTH AND SAFETY

The forestry sector is known for being labor intensive and hazardous. All of our portfolio companies work hard to provide a safe environment for their workers. This involves extensive safety training, improved safety policies and equipment, and improved communication and emergency response systems.

Skills development is key for an efficient and well-organized workforce and is highly valued by our companies. Training is provided for employees as well as contractors, and is organized both in-house, and with accredited training providers.



4. SUPPORT FOR CONTRACTORS AND SMEs

Forestry companies employ outside contractors to assist with many aspects of forest management, from planting and maintaining forests to harvesting and transport of logs. ASFF portfolio companies have made a major investment in building the capacity of these local Small and Medium Enterprises (SMEs) to provide quality services in a safe and efficient manner.

It's a win-win scenario – employment is generated at grassroots level and small business owners are taught business skills that will help them expand and improve their companies, while portfolio companies benefit from loyal, skilled contractors.

MTO, with support from CAP and our investor DEG, established its Contractor Development Program in 2016 with the explicit goal of enriching and galvanizing MTO Group's supply chain.

“Supporting our locally owned businesses and communities adds massive value to us. We are privileged to be able to empower and grow with our partners.”

MTO Group CEO
Lawrence Polkinghorne



MIRIAN & LILIAN TRANSPORT

Providing silviculture
services for MTO
in the Bergvliet,
White River area.



Lilian Ndhlovu
(left), owner
of Mirian and
Lilian Transport,
with some of
her employees.

One success story from MTO's Contractor Development Program's that of Lilian Ndhlovu, owner of Mirian and Lilian Transport, who today employs 25 people and provides silviculture services for MTO in the Bergvliet, White River area.

Her forestry journey began working alongside her husband, when she developed a love for forestry and decided to register her own company. She was chosen to take part in MTO's incubation program - an opportunity to improve her all-round business skills.

"The program gave me a chance to interact with and learn from fellow contractors - instead of competing against them."

Through this program, we have seen incredible loyalty from our contractors, especially during the fires of 2017 when all of the program's contractors put their teams and their own lives on the line to save the plantations that they build their livelihoods on.



Kilombero Valley Teak Company Supporting Tanzania's growth

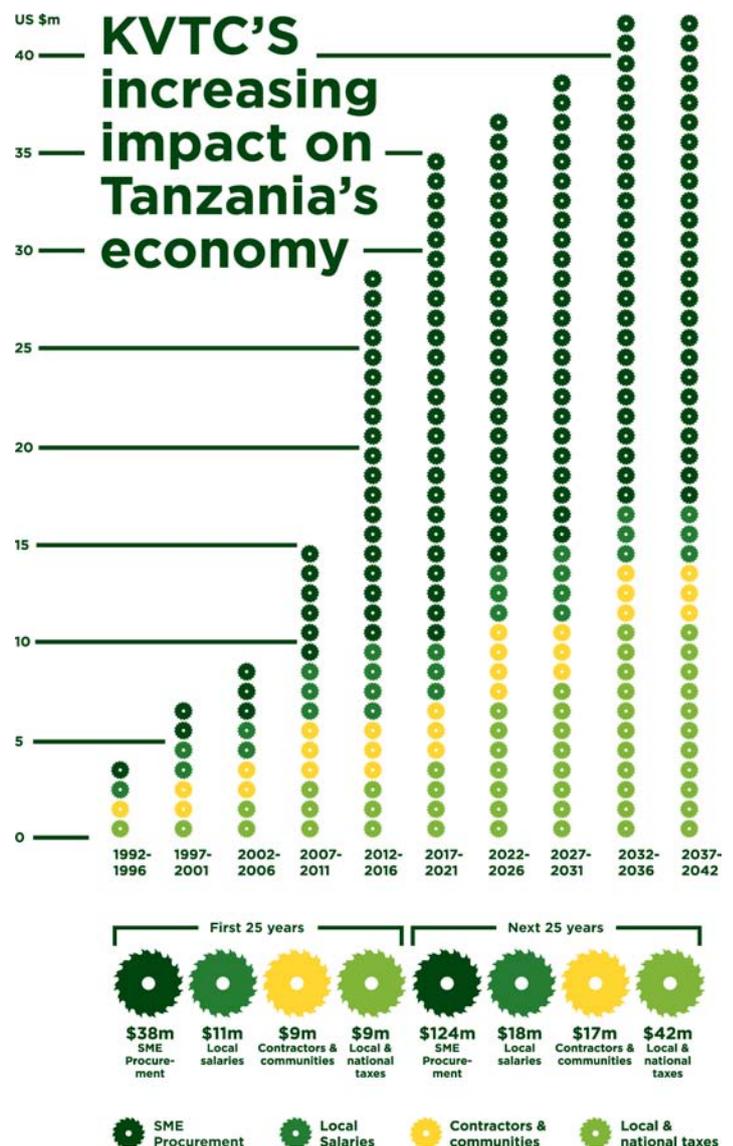
Established in 1992, KVTC's shareholders have spent over \$50 million to establish 8,000 hectares of teak plantations and a modern sawmill. The majority of shareholder investment and revenues have flowed directly into the Tanzanian economy over the first 25 years of development. \$38 million was spent on SME procurement, \$11 million on local salaries, \$9 million on contractors and communities and a further \$9 million on local and national taxes. In the next 25 years, growing revenues will channel much greater sums back into the local economy.

Sustainable harvesting and replanting

Twenty-five years after the first trees were planted at KVTC, the company has reached a steady state of sustainable harvesting and replanting and has finally begin to generate positive cash flows to begin repaying its shareholders' investments. At the same time, it will continue to act as an engine of local economic development in the Kilombero Valley.

Over \$400 million of foreign currency revenues from the sale of KVTC products are expected to flow into Tanzania in the next 25 years. A substantial portion of these revenues will remain in the local economy in the form of wages, local procurement, taxes, and community investments.

“Sales of KVTC's products are projected to bring over \$400 million of foreign currency revenues into Tanzania in the next 25 years.”





4. ENVIRONMENTAL IMPACT

Proactive measures to protect climate and biodiversity

Wetland and forest conservation, anti-poaching, and carbon sequestration

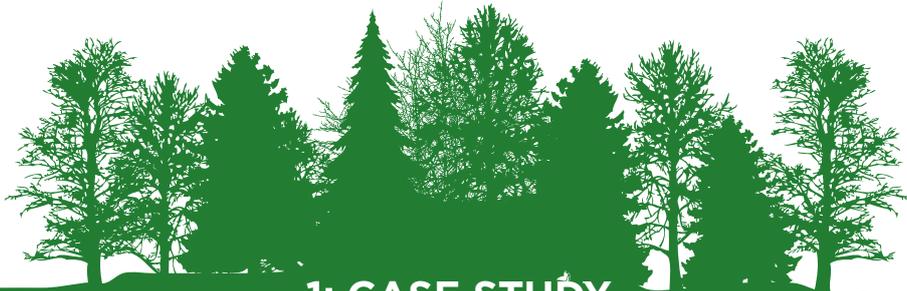




Future generations rely on us

to secure forest, woodland, grassland and fynbos ecosystems in conservation areas to help to preserve valuable plant and animal biodiversity.

All our portfolio companies proactively manage conservation areas, prevent illegal logging, rehabilitate damaged land and make sure that forest and other natural ecosystems set aside for conservation, are not degraded or destroyed.



1: CASE STUDY

SEQUESTERING CARBON AS TREES GROW

Forestry is one of the most cost effective ways to mitigate climate change. Forests play a critical role acting as a carbon sink that sequesters carbon dioxide that would otherwise be free in the atmosphere. However, deforestation undermines this important carbon sink function. It is estimated that 15% of all greenhouse gas emissions are the result of deforestation.

Our portfolio companies act as a significant carbon sink, sequestering approximately one ton CO₂ for every cubic meter of net forest growth. Although the net sequestration levels vary from year to year depending on harvest levels, the sequestration from our portfolio averages around 2m tons of CO₂ per year. Additional CO₂ is stored for decades in the solid wood portion of the final product mix.

An estimated 15 million tons of CO₂ are currently stored in standing trees across ASFF's plantations, in addition to an estimated 142 million tons of CO₂ stored in CBG's natural forests in Gabon.





2: CASE STUDY

WETLAND REHABILITATION IN SOUTH AFRICA

Wetlands are critically endangered ecosystems in South Africa. This natural resource plays an all-important role in food and water security, especially in a water scarce country threatened by the effects of climate change.

MTO Group undertook an extensive wetland rehabilitation program with the Working for Wetlands program in the Tsitsikamma area of South Africa. Over ten years, the project has cleared approximately 200 hectares of alien invasive species, and revegetated 2,882 m₂ of riparian and wetland banks.





3: CASE STUDY

A CONSERVATION MOSAIC IN TANZANIA

In East Africa, 93% forest cover has been lost since 1900* due to clearing of natural woodlands for charcoal and agriculture. When KVTC was established in 1992 at the invitation of the Tanzanian government, the area around its 28,000 hectare concession was still largely forested. KVTC's mosaic planting pattern intersperses planted teak compartments with miombo woodlands that act as wildlife corridors and reservoirs of biodiversity. Ultimately, 8,000 hectares of teak was planted, and the remaining 20,000 hectares has been managed as conservation area, protected from encroachment by the company and its trained community forest guards.

A satellite analysis found that the area outside KVTC's boundaries suffered severe deforestation over the past two decades, while KVTC's natural forest reserves have been largely spared due to the conservation efforts of the company and its community partners.

**From: Aleman, J.C. 2018. Forest extent and deforestation in tropical Africa since 1900. Nature Ecology & Evolution (2) 26-33.*

This aerial photo shows the boundary between KVTC and the contiguous countryside, where significant deforestation has occurred.

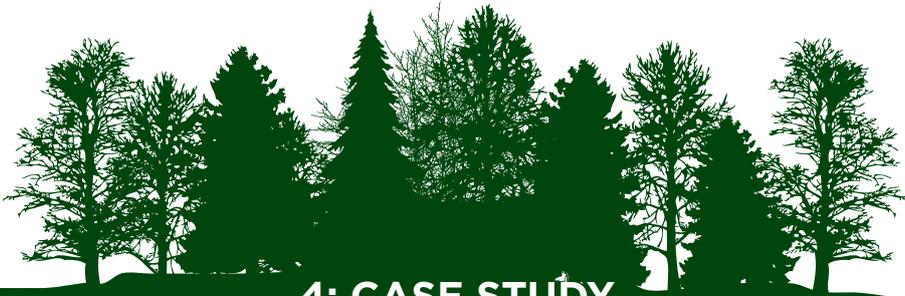
31%

loss of forest cover outside KVTC boundaries Ulanga district 1991-2013*

3%

loss of forest cover inside KVTC boundaries during same period

**Based on satellite image analysis and field verification by UNIQUE forestry and land use GmbH, 2013.*



4: CASE STUDY

ANTI-POACHING EFFORTS IN GABON AND TANZANIA

Poaching remains an area of key concern throughout Gabon, where CBG is in operation. The company has addressed this issue through the PROLAB Project, a public-private partnership between the Gabonese Forest Administration, CBG, and WWF to fight poaching in the Mandji concession and between and around the two National Parks of Loango and Moukalaba-Doudou. Several oil companies, that have concessions in the CBG area and share the roads and access points, fund the project.

PROLAB had significant success in 2017, with a 25% increase in patrols, and a 180% increase in vehicle control checks through the use of manned gates. CBG also spear-headed a first-ever biodiversity and large mammal survey to identify areas of high biodiversity, covering CBG's concessions as well as the neighboring national parks. The study covers 7,049 km² and the inventories, which are to be repeated every five years, will allow careful monitoring of biodiversity trends.

Meanwhile in Tanzania, KVTC employs 28 trained game scouts to patrol its plantation and natural forest areas, tracking wildlife movements, and monitoring and recording encroachment, illegal logging, poaching and fires as part of an effort to prevent illegal activity and to conserve the natural woodlands.



5. SOCIAL IMPACT

Strategically engaging with local stakeholders

Building shared value
with communities
through proactive
communication
and strategic local
investments





Improving the lives of local communities

Forestry plantations are often in close proximity to populated villages. Therefore mutually beneficial relationships with the community are vital for the well-being of the forest and the success of the company. Local communities play a significant role in a forestry plantation's production, development and conservation, and the forest plantation is simultaneously a source of livelihood and employment for the local communities.

CAP has worked closely with its portfolio companies to build management capacity to engage proactively and strategically with community stakeholders. This support has included training, technical assistance, and intercompany exchanges of best practices.

The following pages include a number of successful case studies:

“When our success is so centred on our stakeholders, we need to stand up and not sit down.”

**Nhlanhla Nxumalo,
Peak Timbers Environment
& Community Manager**





1. FIGHTING FIRE, CREATING LIVELIHOODS

One of the biggest challenges forestry plantations face is the threat of fire – often caused during the illegal collection of wild bees when farmers smoke out wild hives. Peak Timbers has put various community engagement programs in place to incentivize local communities to protect the forest from fire. For example, Peak pays a finder's fee to communities

who identify wild hives, and then provides the honey to the community after safely extracting the hives. A Beekeeping Project, in partnership with TechnoServe, has provided more than 450 people with timber as well as training to build beehives and maintain bees. Assistance is also provided regarding markets for the honey.



2. KVTC INVESTS IN LOCAL COMMUNITIES

KVTC and its surrounding communities depend on each other, which is why the company runs various initiatives to ensure a better quality of life for those living in the 17 villages associated with the company.

Villages are encouraged to provide services such as patrols and boundary maintenance to KVTC. Incentives to prevent uncontrolled wildfires and poaching are also part of this formally structured village contract. Annually this generates about \$25,000 income for some of the poorest villages in Tanzania.

In 2002, **KVTC established a Social Fund** to support the communities that have granted them land. The company consults with the surrounding villages to determine their needs, and funds projects on that basis. Funds have helped build schools and roads, improve medical care and served to address community needs. \$315,000 has been invested in these projects over the past sixteen years.





3. PARTNERING WITH LOCAL FARMERS TO PLANT TEAK

Through KVTC's innovative Outgrower Support Program, local farmers can convert unutilized farmland to teak forestry with seed, fertilizers, financial and technical support from the company, as well as a centralized processing facility and a purchase guarantee. To date, this has supported approximately 350 farmers who have planted a total of over 1,000 hectares of teak. KVTC aims to add another 2,000 hectares of outgrower teak areas in the coming years.

This outgrower program will build long term wealth for community members, benefitting from KVTC's technical expertise, financial support, and access to markets. KVTC will also benefit by having access to additional raw material for its teak manufacturing plant.



“To date, 350 farmers have planted over 1,000 hectares of outgrower teak.”



4. CAREFUL MANAGEMENT OF LAND USE CONFLICTS

Global Woods is located on a Ugandan national forest reserve, dedicated to plantation forestry, but surrounded by agricultural communities. Approximately 12,500 people live in 20 villages around Kikonda, most of whom live on below \$1 a day. The communities have in the past illegally depended on the forest reserve for resources so careful management of local stakeholders and localized land use is essential to minimize conflicts. The company's approach is very much oriented toward relationship building and the development of positive and responsive communication channels.

Global Woods has benefited from a meaningful grant from DANIDA, the Danish development agency, which has supported agricultural development and extension work for local communities and cattle keepers. The program has shown significant successes in surrounding communities. Agricultural extension work reached over 1,000 households and has resulted in increased farm yields by up to 100%.

Boreholes and valley dams have been built for communities, **increasing access to safe water in the selected communities by 75%**. Village savings groups have been established, supported, and expanded. Regular consultations have been held with community members and leaders, leading to improved relations with nearby communities.

This work has developed an important network of local allies and has mitigated land use conflicts with local cattle grazers, among others.





5. INVESTING IN WORKER NUTRITION

The extensive energy output required for tasks related to forestry are often at odds with the nutritionally poor diet of forestry workers. This nutritional shortfall can contribute to fatigue-related injury and under-performance. Recognizing this constraint, a study to determine the benefits of a nutritional supplement for workers was initiated by CAP in order to objectively evaluate the impact of providing a daily nutritionally fortified meal.

As a result, a worker nutrition program was initiated in 2013, and has been rolled out to many of the forestry companies and processing plants in the portfolio.

The program now provides supplementary nutrition to approximately 2,000 workers on a daily basis.

- **The program is well received by workers**
- **Benefits in health and job satisfaction**
- **Safer work environment**
- **Reduced absenteeism**
- **Sustained productivity**
- **Additional benefit to workers above wages**



6. GET IN TOUCH

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