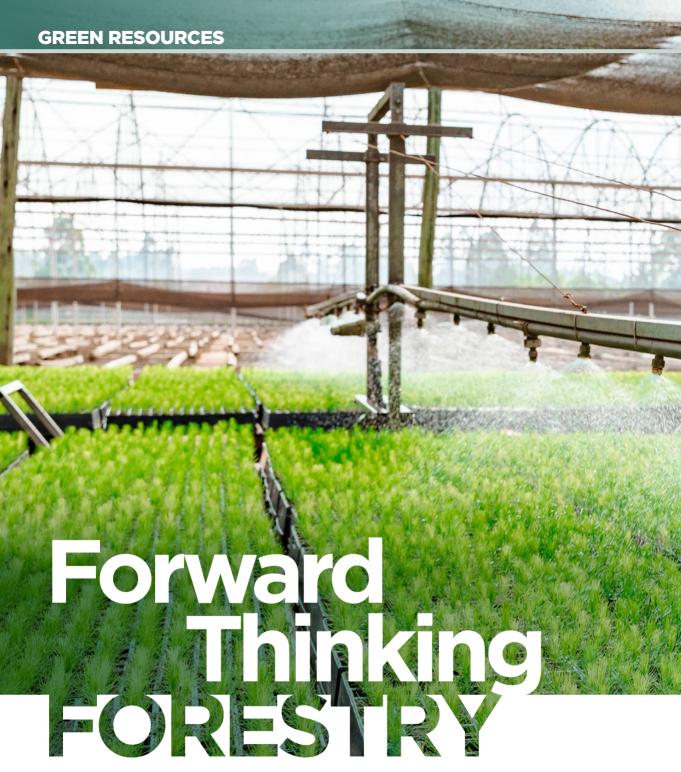




SUSTAINABLE AND PEOPLE-CENTRIC FORESTRY BUSINESS



Forestry in Africa can be both sustainable and profitable, we speak with Hans Lemm, Group CEO of Green Resources, about how the company is expanding and, in the process, making an impact on the lives of local communities

Writer: Marcus Kääpä | Project Manager: Thomas Turnbull



ith such a focus on global sustainability, it is no surprise that plantation forestry is an internationally growing industry. The removal of woodlands and rainforests, and the clear link between forestry reduction and the rise in carbon levels in our atmosphere, has influenced many businesses and industries to change the ways they

operate.

The Amazon Rainforest, for example, absorbs two-billion tonnes of CO2 annually, making up for five percent of global carbon emissions – a vital contributor to the prevention of global climate change. Continued deforestation consistently lowers its ability for carbon absorption, and because of this there is an urgent need

for a shift in individual and business mentality - a turn to promote and coexist with the environment through sustainable practices.

It is estimated that in in Africa over two million hectares of forests is lost every year. Population growth, urbanisation, and a growing middleclass put pressure on the continent's forests. For Africa, the plantation forestry industry is utilised as a supplier of raw materials for electrification and construction projects, as well as a source of job provision for communities in rural areas. In addition, timber produced from sustainable plantations is easing the pressure on natural forests. Sustainable, responsible forestry is a key to curbing de-forestation and climate change, as well as to develop local economies and generate jobs.

Despite the global impact of the COVID-19 pandemic, this industry in Africa has weathered what many struggled to. Green Resources has seen its products designated as part of the critical supply chain, and so have been allowed to operate throughout government imposed "lockdowns" in Uganda and Mozambique in order to continue the service of its industry customers throughout the pandemic period.

"We have seen limited impact from COVID-19, other than that travel across the region has become more difficult," Hans Lemm, Group CEO of Green Resources, begins. "Aside from a two month "wobble" in April and May, our markets have generally continued to function as before, and we have been able to continue to drive our industrial investment programs.

"COVID-19 has had a major impact on many industries, but I have been positively surprised on the resilience of our industry and frankly the region overall."

"We do expect some more impacts to come in the first half of 2021 but then we foresee a rapid recovery and looking at the results of the local banks as well as other financial indicators we are quite confident on the future," Lemm tells us.

Green Resources is a vertically integrated forestry business that has been active in East Africa since 1995, and currently manages around 35,000 hectares of planted forests spanning Mozambique, Tanzania, and Uganda.

The company primarily produces sawn timber (both treated and untreated) and transmission poles, that serve customers from both private entities as well as government enterprises including national utility companies.



EU NIAN

Supplying the renown Thermal Oil Boiler to Niassa Green Ply's veneer plant in Lichinga is our first project with Green Resources AS.

As East Africa's largest forestry development and wood processing company, we have the great honour to join and board Han's future expansion in sustainable forestry.

We are sure to grow together with Han's ultimate plans for Green Resources AS!



www.eunian.mv

TF Design

TF Design specialises in turn-key project implementation across a range of industry sectors.

Our experience and knowledge in heat transfer, fluid dynamics, combustion, process control, automation, and thermodynamics, coupled with our client-focused approach, enable us to provide innovative, reliable solutions that make your vision possible.

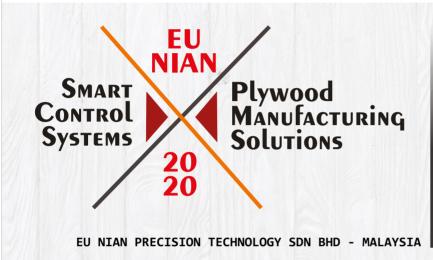
We are in the process of expanding our footprint in Africa, and we are proud to provide Green Resources with one of our Pole Drying Solutions. We look forward to being an engineering solutions provider to Green Resources for many years to come.

T +27 21 887 9288 **E** edward@tfdesign.co.za

www.tfdesign.co.za



Solutions VALUES!



VISIT US @ www.eunian.my



Devon Valley Industrial Park

Contact: Edward Ehlers T: +27 21 887 9288 M: +27 82 458 3014 E: edward@tfdesign.co.za www.tfdesign.co.za

Devon Valley Road

Stellenbosch South Africa



Making it **POSSIBLE**

SOUTH AFRICAN DEVELOPER OF:

- Timber drying kilns
- Control and Automation
- Smokeless incinerators
- Log scanning systems
- Steam piping systems Moisture measuring systems
- **Dust handling systems**
- Steam generating systems
- Pallet treatment system

EXPERTS IN:

- · PLC and PC based control systems
- Finite element design
- Heat transfer
- Combustion
- Fluid dynamics
- Turnkey projects
- Thermodynamics Power generation

"We operate sawmills in Tanzania and Uganda, Pole Treatment Plants in all three countries, and we're currently constructing a veneer plant in Mozambique which will become operational in the second quarter of 2021," Lemm tells us.

"Additionally, a large part of our landholding is certified according to the Forest Stewardship Council (FSC $^{\text{TM}}$) Forest Management Standards, and one of our mills has a Chain of Custody Certificate."

On top of its industrial products for end users, Green Resources supplies raw materials to third-party sawmillers and plywood factories as well as biomass to various industrial users. The company currently employs around 900 employees and another 500-700 workers on a daily basis through contractors.

With approximately 100 private

shareholders, and two large European Development Finance Institutions as financial backers, the company is able to promote forestry in multiple African countries to great effect.

And what really sets the business apart in the industry is its diversified product portfolio, combined with that fact that it is one of the most advanced operations among the "New Generation" African project developers. Including Green Resources, there are plantation forestry projects being developed in Ghana, Sierra Leone, Mozambique, Kenya, Tanzania, and Uganda.

"We believe Green Resources' investors are well positioned to capitalise on the growing global appetite to invest in businesses with strong Environmental and Social Credentials in combination with attractive financial returns," Lemm continues.

"Green Resources has a positive carbon footprint, meaning that our overall business absorbs more CO2 per annum than it emits, and our forestry estates act as a carbon sink."

FROM PLANTATION FORESTRY TO FOREST INDUSTRY

Green Resources operates through two primary business units. The "upstream" unit surrounds the forest plantations and its associated activities, while the "downstream" unit contains the industrial operations where the products from the upstream operations are processed. The raw materials for the downstream units are sourced from the company's own plantations as well as from third-party suppliers including smallholder tree farmers

"In our upstream areas we manage approximately 35,000 hectares of planted forestry with around 13,000 hectares in Mozambique, 15,500 in Tanzania, and 6,500 in Uganda," Lemm elaborates.

"The planted areas are roughly split 50-50 between pine and eucalyptus species. The primary product for the pine planted areas are sawlogs (raw material for sawmilling), and for the eucalyptus planted areas they are transmission poles and peeler logs (raw material for plywood production).

"In addition, all forest areas generate by-products for various biomass markets ranging from domestic to industrial use."

The two business units allow Green Resources to expand its forestry development while also sourcing sustainable wood products and resources to a multitude of customers.

The company's upstream operations consist of two sawmills in Tanzania and Uganda, three pole plants covering the firms three countries of operation, a Tanzanian based briquetting plant, and a veneer factory in Mozambique. The mixture of tree species, products, and in-house and external processing

STEMMING FROM AN OPPORTUNITY

We asked CEO Hans Lemm (HL) about his career past, and how he came to work in the forestry industry.

HL: The short and simple answer is "by accident and not by design". As a young engineering graduate from the Netherlands, I was looking for adventure and aspired to develop an international career and the industry did not matter that much, as a matter of fact I had never even thought of forestry as an industry.

In 2002 I applied for a job in Tanzania following an advert in a newspaper job section that stated: "Wanted: Manager for Chipboard Factory in Tanzania". I mentioned in my application that I had "Africa experience" and to my great surprise I got the job. I started off as the Operations Manager and after six months was promoted to General Manager of the business.

I stayed with this first company for almost three years and then worked for a couple of different companies in the forest industry in East Africa in a variety of roles increasingly senior and more complex in terms of business.

My last role before Green Resources was as CEO of Africa's largest teak plantation, a position I held for just over 10 years. Here I had the privilege to manage the transition from plantation development project to forest industry. In many ways this was not too different from my current role although Green Resources, where I joined in April 2019, is significantly larger, more complex and has a much bigger corporate component that needs to be managed.

















INVESTING IN THE SUSTAINABILITY MISSION

HL: A key investment has been the long-term view of our founders who in a very early stage recognised the potential of green investments in Africa and who positioned Green Resources as a platform for combatting climate change. We believe the importance of green investments is now becoming clearer than ever before, but this was not the case when the company started in the late 90's.

Another investment has been the early decision of the company to comply with the Forest Stewardship Council Principals and Criteria on sustainable forest management. The FSCTM standards have become the must have standard for forestry investments in Africa and in many cases a pre-requisite for accessing capital. Green Resources is proud to manage 38,000 hectares of FSCTM (FSC C106074, C015169 and C107952) certified areas and is in the process expanding its FSCTM Certified areas.

We can start seeing this investment pay off in Uganda where increasing numbers of customers (including Kenyan buyers) are enquiring for FSCTM Certified Timber due to its sustainability credentials.



provides the business with a robust revenue model where many products (as well as geographies) are countercyclical to one another.

"A good example of this is Tanzania and Uganda. Where the Tanzanian pole market was booming most of 2020, it has currently slowed down a bit pending the release of new tenders. At the same time, the Uganda pole market has picked up tremendously since July," he continues.

"The same goes for the Tanzanian timber market which has been sluggish for most of 2020, but we are now seeing an increase in uptake offsetting some of the reduced activity in the pole market.

"The start of the Industrial Operations in Mozambique in 2019 and expansion into veneer in 2021 will further enhance the diversified nature of our operations and strengthen our revenue model."

For many years the focus in African forestry has been on planting new areas but we can see a shift where more investors are looking for investments in downstream operations.

"We hope more investors will come to this conclusion as the industry currently needs more industrial capacity in order to drive the attractiveness of African Plantation Forestry into the future," Lemm says.

COMMUNITY AND OPERATION

Green Resources as an organisation prides itself to be people-centric and sustainability-orientated. Forest plantations are not only a lucrative base for investment but also provide for the environment, ecosystem, and communities.

Green Resources places its

employees and surrounding communities as a highly important aspect of its operations. In some areas, the company provides housing for its staff and their families, and all members of staff are provided with medical insurance cover. For senior members of staff, the firm has in place incentive schemes in order to better the possibilities of those involved.

"We employ around 900 people in Green Resources and a large percentage of our jobs are held by people who had limited exposure to formal employment," Lemm explains.

"Training is a very important part of how we improve the skills of our workforce. During the first half of 2020 we provided training to 2,500 people - most of our staff members received multiple training courses during the first six month of the year.

"The number of fully trained individuals in the first half of 2020 is almost the equivalent of the amount of training we provided in the whole of 2019 (2,700 people)."

The training provided to the Green Resources employees covers a wide range of topics ranging from safe work practices, health education, and defensive driving training, but are also extended to forestry contractors who we assist by training specific skills such as financial literacy courses.

The company does not limit itself to these training courses, however. To better the prospects of any aspiring employee, Green Resources commits itself to individual betterment through providing opportunities such as university sponsors.

"At the moment we have one member of staff following an MBA at the African Leadership University in Rwanda partially sponsored by the company, and we are aiming to increase these opportunities in the future." Lemm continues.

Training doesn't stop with its own workforce, and in Tanzania, Green Resources has a partnership agreement with the Dar es Salaam Campus of Mzumbe University where the company regularly works together with University staff to bring real life case studies to train young graduates.

"Aside from training we believe that dialogue with our staff is very important, and to this end we ensure that our workforce is unionised. In this way management and staff can engage in structured discussions on a wide range of topics - not only salary, but topics such as safety, long term viability, employee and community engagement, the list goes on. We are proud to say that in all the countries in which we operate, our wages are significantly ahead of minimum wage."

PLANTS AND PEOPLE-CENTRIC BUSINESS

Green Resources believes that the surrounding communities are a crucial aspect of its business model and that the company can only truly be successful if the neighbouring communities are benefitting from the company's presence. Because of this, the company seeks to aid the











HL: Suppliers and partners are of crucial importance to our business and we especially see this in less developed markets or emerging forestry markets such as Mozambique where many inputs are not readily available. Essentially our key suppliers in the group invest side by side with us in these territories by putting in consignment stock or bringing product into the country based on a single or limited user base. On the market, we have positive experience with customers taking exposure through prefinance of product.

Aside of the larger scale suppliers our businesses deal with literally hundreds of small-scale farmers who supply some of the raw materials to our processing plants. During the last financial year, we procured raw materials worth \$3.8 million from smallholder forest owners.

surrounding communities through a variety of interventions ranging from CSR activities to creating business opportunities and be part of the company's value chain.

"Green Resources is well aware of the fact that we have access to large areas of land under long term lease agreements where previously these lands were part of communal lands and therefore, we need to ensure that communities benefit from our presence," Lemm elaborates.

"During 2019, we spent close to \$200,000 on community projects, and in the first half of 2020 we have spent \$180,000."

The firm's land titles are critical documents when it comes to discussions with its investors, bankers, and governments. However, the real "title deed" lies in the company's ability to promote and maintain the

relationship with the surrounding communities. Failure in this will result in the loss of rights of access to the landholding.

In this way, Green Resources not only integrates the community into its operations but ensures that it must continue throughout its actions and into the future – solidifying the continual people-centric element to the firm.

"In Mozambique we have for many years had a Community Social Fund where, each year, villages would receive an amount relating to the planted areas, as well as a bonus amount against set indicators (for instance fire avoidance, absence of poaching, and others). We are now in the process to roll out the same Social Fund principle in Tanzania and Uganda where the first disbursement in Uganda was made in November," Lemm elaborates.

"Over the years Green Resources has either direct, or through its social fund, built roads, classrooms, boreholes, hospital wards, teacher's houses, marketplaces and many more structures in the surrounding communities, and it is extremely rewarding seeing structures made with our support being used and maintained by the community."

The Social Fund allows the communities to decide how funds will be put to use and once the company green-lights a project it is cleared for implementation with active company monitoring. The company believes the Social Fund system is a much stronger and longer-term commitment than the traditional approach of one-off projects.

"Probably our biggest contribution to local development is the fact that a significant part of our raw materials, in particular for electricity poles, is procured from smallholder farmers," Lemm tells us.

"In Tanzania and Uganda combined we bought raw materials worth \$3.8 million from smallholder farmers during our last financial year."

Green Resources collectively across its three operational countries has manufactured and sold 111,000 poles during its last financial year - the equivalent of 5,500 kilometres of new power lines built in predominantly rural areas. The integration of communities into the company's value chain provides a brilliant and mutually beneficial situation.







As for the near future, Green Resources is aiming to continue the growth of its operations in Tanzania, Uganda, and Mozambique, forecasting a 15 percent year-on-year growth that will firmly position the company as the largest forestry business outside of South Africa.

INVESTING IN SUSTAINABILITY

There is increasing awareness of human impact on nature and the need to develop sustainable business solutions. Sustainability has become the new norm, and many companies are looking for opportunities to develop this element of business. This is not only because they believe it is the right thing to do, but also due to anticipated regulatory requirements – a positive foresight that is driving environmentally beneficial practices.

It is expected that the EU will soon launch a new raft of measures that will define reporting requirements and sustainability targets. These new regulatory requirements will lead to increased interest in ecological business models.

As a result, sustainable investments as well as those in natural capital, are rapidly emerging as an asset class on their own, and many large global asset managers are searching for opportunities to invest in sustainable enterprises. One lesson that can be taken from the COVID-19 pandemic is that environmentally friendly businesses have proven to be resilient against external shock.

Green Resources is leading the way in East Africa and investors are encouraged to keep an eye on the developments of this business.





GREEN RESOURCES

info@greenresources.no www.greenresources.no







info@greenresources.no www.greenresources.no