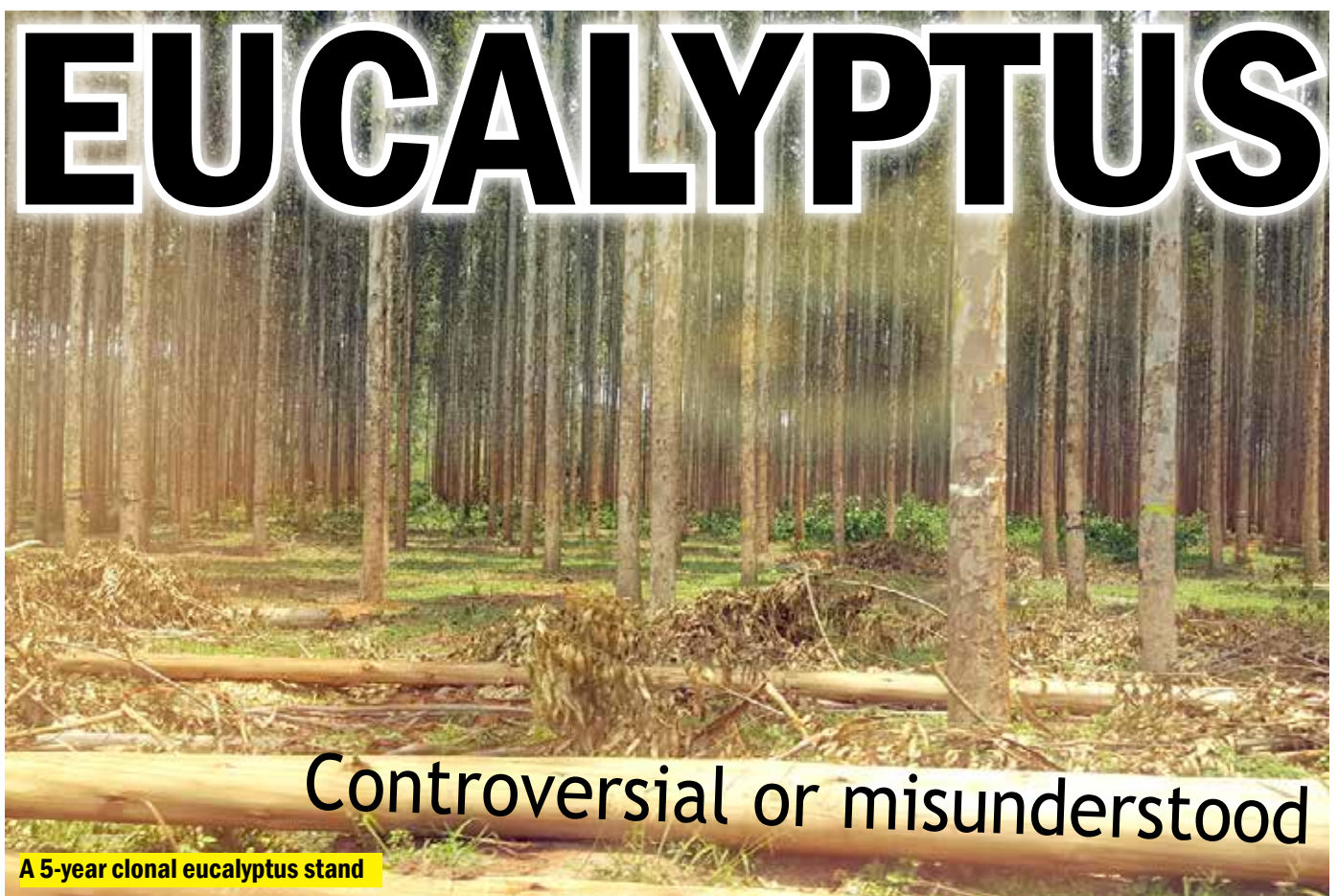


EUCALYPTUS



Controversial or misunderstood

A 5-year clonal eucalyptus stand

Due to the fast growing population and the ever increasing demand for fuel wood, poles and timber, Eucalyptus growing has been adopted by many farmers in the tropics and subtropics because of its fast growth and therefore ability to provide the desired products in a much shorter period compared to other known tree species. While it has been a popular choice

for introduction in the warmer parts of the world these plantations have been criticized in some quarters because they are alleged to cause adverse effects on soil and hydrology with comparison to other crops. Recently the President of Uganda Yoweri Kaguta Museveni also weighed in on the Eucalyptus subject. UTGA opines that it is important for the right information to be disseminated for informed

action.

For farmers and communities to decide whether or not to plant Eucalyptus, it is important that they are equipped with basic facts on Eucalyptus behavior and management.

The advantages of growing Eucalyptus include:

1. Eucalyptus can provide benefits quickly thus meeting the huge

To page 3

Paulownia: The Tree of the future

Paulownia is a medium tall large-leafed fast-growing deciduous tree from China. The trees are mainly grown for

timber, but are also used for fodder, shade, crop protection, prevention of land degradation, as a fast-growing landscape tree, and

for carbon sequestration. The trees withstand a wide range of temperatures but need reliable rainfall or irrigation in the growing season. Paulownia was planted at Godavari to determine whether it would

To page 3

FSC hold certification workshop for smallholder in East Africa



Participants of the FSC engagement workshop

FSC Africa held an engagement workshop on new approaches for the design of a small holder certification system in Dar es Salaam on 9 - 10 May 2017. The objectives of the workshop included:

1. Creating awareness on Forest Management Certification and Forest Stewardship Council® with emphasis on how best to engage with FSC®

2. Discussing new approaches and initiatives for smallholder certification within the FSC system, with a focus on the progress update of work done by FSC New Approaches project globally, and in Africa.

3. Increasing understanding of FSC Group Certification as a feasible approach for smallholders to participate in and benefit from Responsible Forest Management.

There was regional participation from Uganda, Kenya, Tanzania with facilitators from South Africa, Portugal and Sweden. UTGA, FSSD, NFA participated in this forum.

UTG SACCO NEWS

Financing Timber Value addition

Since 2011 UTG-SACCO has been lending to members to help them bridge cash flow gaps during planting, weeding and pruning activities! The SACCO that started with small loans as low as UGX 3,000,000/= can now finance bigger plantation activities up to UGX 30,000,000/=! The SACCO has moved on and we are proud to inform the membership that UTG-SACCO is at the level of financing timber Value addition.

UTG-SACCO Financed the purchase of a WOOD CRUSHER MACHINE as seen in the picture!

With the need of adding value to his wood, one of our members, Eng: Ephraim Kisebwa identified this machine and made an order. He did not have the cash at hand but being a Good Saver with UTG-SACCO that he is, he requested for a quick loan and his application was worked on immediately. The UTG-SACCO was able to release the finances up to the tune of \$ 8,450 to enable him import his machine. We therefore encourage UTGA and SPGS growers to join the UTG-SACCO and use the SACCO to provide financial solutions to you.

How to join UTG-SACCO: You pay a one off membership fee of UGX 100,000/= One can buy shares each at UGX 20,000 and make monthly Sav-



Wood crushing machine

ings on UGX 50,000/= every month. However, minimum shares for a member to access a loan are 50 Shares (UGX1, 000,000).

Contact us at UTGA Office Tel: 0776191414/ 0701109440, Website www.utg-sacco.org

Do not let the city wolves fail your dreams.

The writer, Moses Kasirivu is the SACCO Officer

EUCALYPTUS

wood deficit as it makes good timber for construction and utility poles hardboards, particle board, furniture and related products.

2. Fuel wood and farm timber can be produced in relatively shorter rotations
3. Eucalyptus forms good shelter belts for crops, houses and other plantation species
4. Eucalyptus forms rapid tree cover for restoration of degraded areas
5. pulp and paper industries
6. It can be grown on a variety of sites
7. Many species produce nectar for honey bees which can support apiculture
8. A wide range of essential oils can be extracted from the leaves and bark
9. It provides raw material for pharmaceutical and confectionery industries
10. It coppices after harvest and replanting is not necessary until after the third rotation
11. It fetches a good price for all the products.

Disadvantages of growing Eucalyptus

1. Being a fast growing species, it is an aggressive feeder and therefore consumes soil nutrients and water at a comparatively higher rate.
 2. It may affect soil fertility due to limited ground litter
- Whereas the advantages are well qualified, the negative aspects are discussed here.

Eucalyptus and water uptake

Water is used by the trees to collect nutrients from the soil to different parts of the plant, after which most of the water is released to the atmosphere through transpiration. While Eucalyptus may take up relatively more water, it uses the water more efficiently than other species. The tendency of eucalyptus to take up relatively more water than other tree species is attributed to the fact that it is an aggressive feeder and its rate of nutrient uptake is high. This is not different from for all fast growing species including annual

PAULOWNIA: Tree of the Future

grow in the Himalayan mid-hills and the optimum conditions. It has proven highly successful, with almost 20 m

of growth in ten years from saplings and is recommended for growing for soft timber.



PAULOWNIA: To boost commercial forestry in Uganda

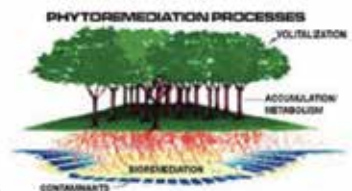
Considered to be the highest end-use value, mature trees are rough-cut into lumber which is then sawn into thin strips of wood veneer that can be used for value-added products such as furniture, specialty wood products and highly finished craft products. Because of the additional processing involved in making the veneer, the value remains high due to the desirable finish and quality it imparts to final products. Rough-cut trimmings that are usually wasted in the veneer process can be subsequently used for Cellulosic Ethanol.

Exceptional Growth Rate

- 2 year Height up to 32 feet
- 2 year Diameter 6-8 inches
- 4-5 year Height up to 45 feet
- 4-5 year Diameter 12-14 inches

- Knot Free: Average height of up to 35 feet to first limb at 4-5 years
- Reforestation: New tree grows from stump of harvested tree.
- Non-Invasive: Bonded
- Reforestation: New tree grows from stump of harvested tree
- Bioremediation: Removes and converts many pollutants from the ground (phytoremediation)
- Flash Point: 477°F
- Cellulose content: 46-49
- Specific Gravity: 0.28 - 0.30
- Hemicellulose Pentosan: 22 - 25%
- Lignin: 21 - 23%

Paulownia also adapts to a variety of climates, from warm and temperate to tropical, and can even withstand temperatures as low as -20° C (different species vary in their resistance to the cold). The mean annual temperature for Paulownia is 13-25° C. Precipitation needs also vary greatly, from as low as 500 mm to a maximum of 2,000 or 3,000 mm annually.



A review of research findings for Paulownia trees concludes that this measurable form of carbon capture qualifies for at least one of the emerging types of Carbon Reduction Certificates, namely the Verified Emission Reductions (VERs) for voluntary markets.



Our laboratories for research & Development



Our nursery



Young tree from stump.

Biomass production



Intercropping





PLANET GREEN WORLD U LTD

Conserving Environment and Financial Solutions

Undertakes all forest services, horticultural services, Agricultural farm supplies, Construction, Real Estate Financial Services

FOREST ESTABLISHMENT AND MAINTAINANCE FOR EUCALYPTUS SPP FOR FOUR YEARS

ESTABLISHMENT

Year of trees	Activity	Variation of Months	Cost Ugx(ha)	Remarks	
Year 1	Site manager	All seasons	500,000 per month	Per month. Supervising the day to day activities on the plantation to ensure quality of work and standard is achieved	
	GPS survey and Compartmentation	In the beginning	50,000	Using a GPS to produce a clear site map	
	Bush clearing	Dec -Jan	300,000	Cutting & piling	
	Seedling booking	Jan -Feb		You are required to deposit a certain amount of money	
	Land Preparation	Jan-Feb	200,000	Cutting trees & burning	
	Lining out and pitting	Mar -Apr	170,000	Proper specimen	
	Pre-plant Spray	Mar-Apr	250,000	Equipment, water and Chemicals inclusive(non- selective) this helps to suppress weeds for a longer period	
	Pre -plant termite control	Mar-Apr			
	Planting	Mar-Apr	150,000	According to SPGS and NFA standards	
	Patrol men	All seasons	250,000per month	To keep the plantation safe from fire outbreak & vermin	
	Survival Count	Apr-May	10,000	Stock checking to ensure that the stocking is okay	
	Beating up	Apr-May	150,000	Replace seedlings that died in order to achieve the desired stock	
	MAINTANANCE				
		Spot weeding	May -June	120,000	Create a clean spot of 1 metre radius from the tree to avoid competition for nutrients and light between trees and weeds.
	Slashing	Jun -July	150,000	To reduce competition of weeds and trees for nutrients and light	
	Post -plant spray	Jun -July	270,000	Chemical weeding	
	Post -plant termite control	Jun -July			

CONTACT: Tel: 0781 886 588, email:planetgreenworldugltd@gmail.com, website:planetgreenworldltd.co.ug

PLANET GREEN WORLD U LTD

Conserving Environment and Financial Solutions

We offer all forest services, horticultural services, Agricultural farm supplies, Construction, Real Estate Financial Services.

FOREST ESTABLISHMENT AND MANTAINANCE FOR EUCALYPTUS SPP FOR FOUR YEARS

Year of trees	Activity	Variation of Months	Cost Ugx(ha)	Remarks
	Fire line Maintenance	All season	200,000 per km	To improve plantation access and they act as firebreaks
Year 2	Slashing	Apr-May	150,000	For easy access to carry out other operations
	Acces pruning	May -Jun	120,000	
	Post-plant spray	Sep-Oct	270,000	
	Fire line Maintenance	All seasons	200,000 per km	
Year 3	Slashing	Apr-May	150,000	Trimming off some shoots using shears in leaders allowing the tree to grow in good shape Marking and felling. The purpose is to increase the growing space and resources available to remaining tree stands
	Singling	May -Jun	270,000	
	1 st Thinning	Oct-Nov	400,000	
	Fire line Maintenance	All season	200,000 per km	
Year 4	Slashing	May -June	150,000	Proper removal of 2nd layer of braches to produce knot free timber To create space and reduce competition giving room to the remaining stand for better growth which attain more volume.
	2 nd Pruning	June	120,000	
	2 nd Thinning	Sep-Oct	400,000	
	Slashing	Oct-Nov	150,000	
	Fire line Maintenance	All season	200,000 per km	

NB.

If the area is flat, cost in planting varies according to the spacing as follows:- (a) 3X3 one pays 320,000 and (b) 2X2 one pays 400,000. When the area is sloppy, costs range from 400,000 and above for both spacing regimes. For spot weeding at 2X2 one pays 200,000.

Our management plan as a guide to plantation operations has been up dated at an interval of 1 to 4 years with targeted objectives. It describes variation of costs for some activities based on Landscape and altitude of the area as well as Inflation.

The activities include: - Bush clearing, Land preparation, Lining out and pitting, Pre –plant spray, Planting, Spot weeding, Slashing. Post plant spray, Thinning. GPS Survey. All these are negotiable

CONTACT: Tel: 0781 886 588, email:planetgreenworldugltd@gmail.com, website:planetgreenworldltd.co.ug

SGR: KENYA LAUNCHES RAIL LINE

Kenya recently launched its high-capacity, high-speed standard gauge railway (SGR) for passenger and freight transportation, which runs from Mombasa to Nairobi. The SGR replaces the meter gauge railway passenger line constructed during the British colonial period that was commonly referred to as the lunatic express.

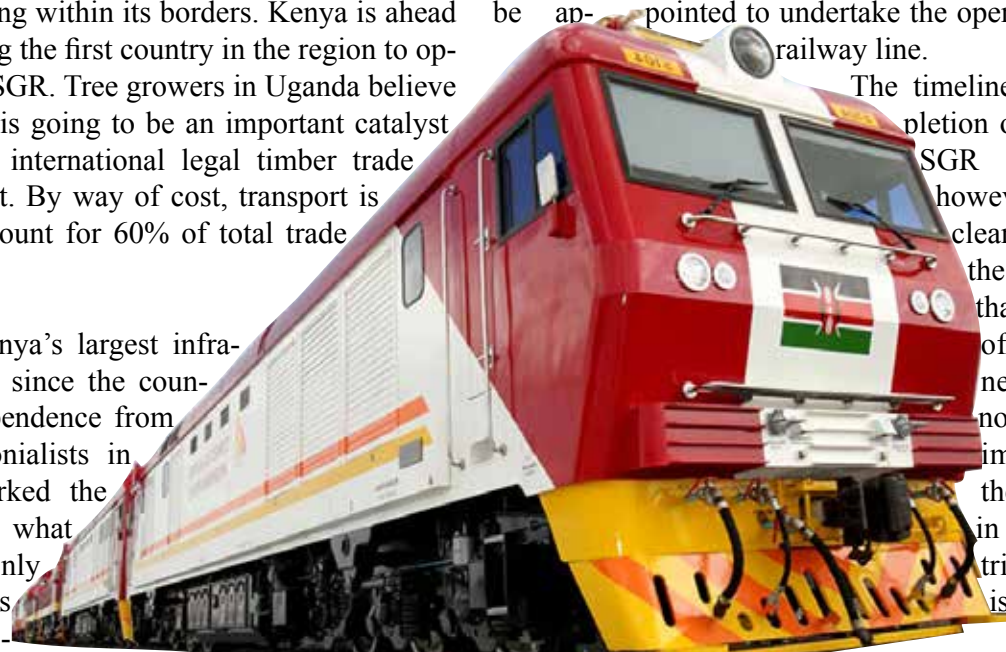
The Kenyan SGR is part of a proposed wider regional network for the development of railway connecting Kenya, Uganda, Rwanda and South Sudan. Each of these countries is expected to develop the part of the railway line falling within its borders. Kenya is ahead of the pack, being the first country in the region to operationalize the SGR. Tree growers in Uganda believe that the railway is going to be an important catalyst of regional and international legal timber trade through transport. By way of cost, transport is estimated to account for 60% of total trade in timber.

The SGR is Kenya's largest infrastructure project since the country gained independence from the British colonialists in 1963. SGR marked the introduction of what is now commonly referred to as "government-to-

government procurement," where the law allows projects financed through concessional loans and grants from foreign governments to be exempt from Kenyan procurement law.

During the 13th Summit of the Northern Corridor Integration Projects (NCIP), an initiative of Kenya, Uganda, Rwanda and South Sudan aimed at promoting integration by fast tracking regional projects for the benefit of citizens and the development of the region, the Heads of State of these countries resolved that the Chinese firm that constructed the SGR would be appointed to undertake the operation of the railway line.

The timelines for completion of the entire SGR network is however still unclear as some of the countries that are part of the SGR network have not yet began implementing the project in their countries. Uganda is among those.



Drone technology the future for forestry

Unmanned Aerial Vehicles (UAV's) are increasingly being used in commercial applications such as Sports, Journalism, Architecture, Construction & Housing, and in the Military. This list now includes forestry with applications that provide additional information on certification/legality.

Inspection/estimating

Drones give large contractors a perspective that they never had before without paying for aerial photography from a plane or helicopter. They provide a photographic perspective of large commercial sites, with a better understanding of the geographic challenges/realities of the site. Drones can also be used to take land measurements that assist in the bidding/

estimating process.

Measurements & monitoring progress

Drones are being used in many ways to help determine what is required on site.

It is considerably faster and more efficient (one airborne view that can be repeated effortlessly throughout the day/week/month vs. numerous set-ups on the ground). This is accomplished through the science of photogrammetry. Points with real-world positions are included in each photograph, and then the person processing the photo can apply a scale via those points to determine the size of select objects.

Inspection: Nothing replaces the accuracy of inspecting something while standing right in front of it but

in times of urgency, or in dangerous locations where inspections may put someone at risk, a drone can quickly move into position to capture imagery that shows the condition of site.

Legality: It's important for the business user to understand and follow the local regulations in country. In the US, operators must pass an FAA-proctored airman aeronautical knowledge exam (commonly referred to as the FAA Part 107 test) and then apply for a remote pilot airman certificate from the FAA.

Where telematics and machine control have dominated the technology discussion for the last few years, drone-mounted evolutions in these technologies appear ready to dominate headlines for the next few years.



MWE leads in promoting PPPs

Sophie Kutegeka from IUCN makes a presentation

The Ministry of Water & Environment through the Forestry Sector Support Department (FSSD) organised an initial training from April 24 – 28, 2017 in Entebbe on the dynamics of preparing fundable project proposals on Sustainable Forest Management. The process which was facilitated by the United Nations Forum on Forests (UNFF) involved designing a project pro-

posal to access multilateral donor financing. The participants were from government, private sector and civil society which shows the importance of Public Private Partnerships (PPPs) as vehicles of cooperation, collaboration and proactivity among state and non-state actors.

UTGA among other stakeholders participated and was also part of

the core drafting team invited to finalise this proposal development process and working with an international consultant, Jorge Illescu, a drafting workshop was held from 31 July–02 August 2017 at Hotel Africana in Kampala. This was to review and validate a draft pre-feasibility study and concept note to help conclude this process.

On Friday 07 July, 2017, UTGA organised training for its new Board and members of the 6 committees of the Board. The training was conducted by the Institute of Corporate Governance (ICGU) at City Royal Resort Hotel in Bugolobi.

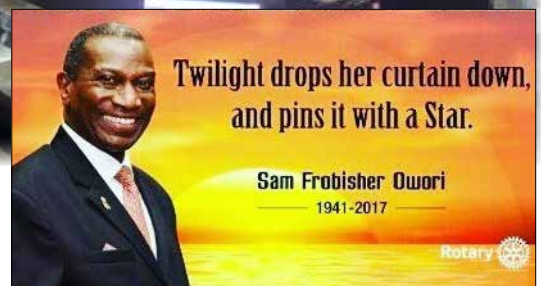
13 days after that training, news filtered in that the Executive Director of the ICGU, Rotarian Sam Frobisher Owori who had recently been elected as the President of Rotary International had died in Texas, USA when he suffered post-operative complications after undergoing leg surgery.

Sam Owori was buried at his ancestral home in Kidera village, Rubongi sub county in Tororo District. UTGA condoles the family, friends, Rotary, ICGU and Uganda on the loss of a true and gentle star.

ICGU Training for UTGA, ICGU loses its ED

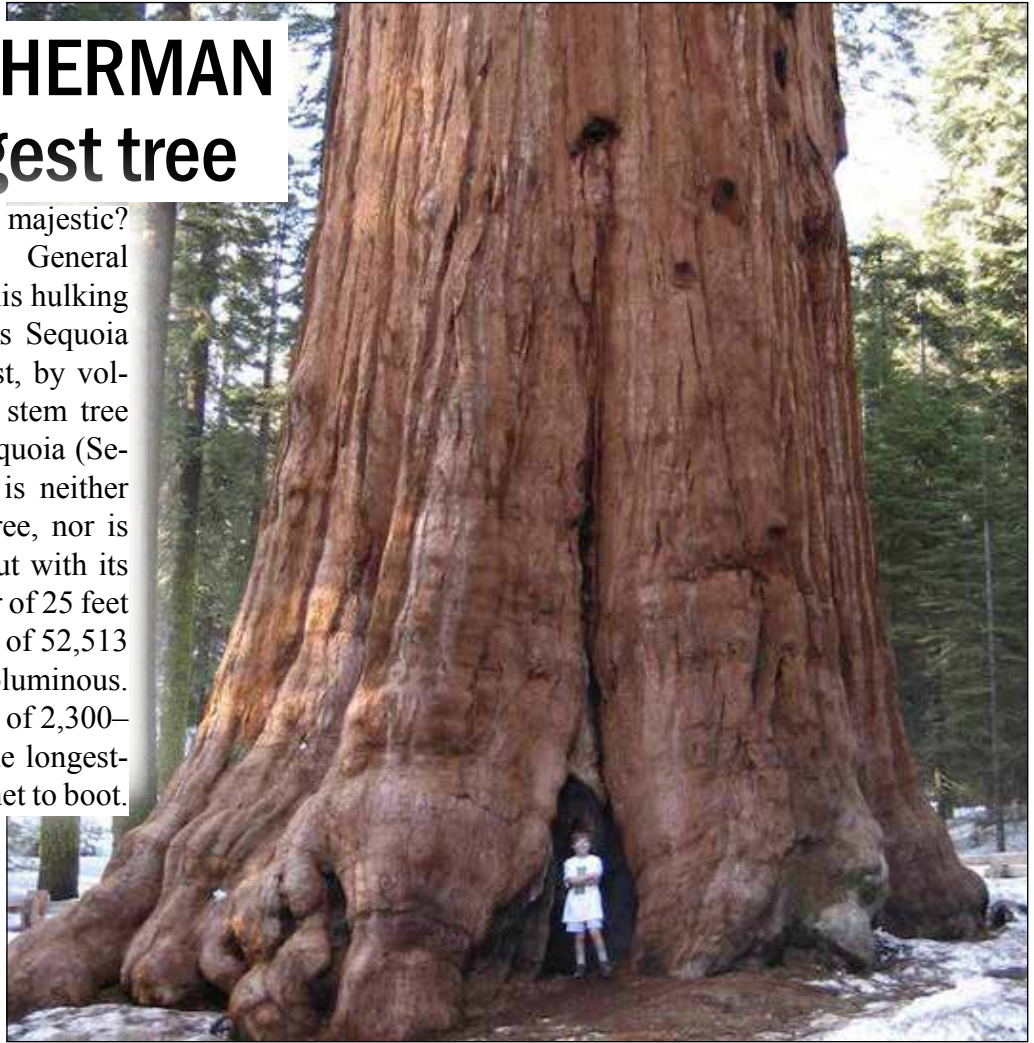


UTGA Board members attending a training on Corporate Governance & Business Strategy facilitated by ICGU



GENERAL SHERMAN Worlds Largest tree

How do you say majestic? How about “the General Sherman Tree.” This hulking grand dame in California’s Sequoia National Park is the largest, by volume, known living single stem tree in the world. This giant sequoia (*Sequoiadendron giganteum*) is neither the tallest known living tree, nor is it the widest or oldest – but with its height of 275 feet, diameter of 25 feet and estimated bole volume of 52,513 cubic feet, it’s the most voluminous. And with a respectable age of 2,300–2,700 years, it is one of the longest-lived of all trees on the planet to boot.



Husqvarna reduces their global carbon footprint

The Husqvarna Group is building its first solar power generating facility at its current injection molding site in Nashville, Arkansas, USA. The new facility is expected to reduce their CO2 footprint by approximately 1,000 tons in the first year of operation and approximately 25,000 tons over the expected 25 year life of the facility. The photo displayed shows a similar solar plant as the one that will be built in Nashville.


The new solar power generation plant has a capacity of 1.3 megawatts (1.3 million watts) of solar power, allowing the Husqvarna Group to increase its share of electricity from renewable sources of energy, and thereby reduce greenhouse gases and other emissions that are incurred from electricity generated by coal.

Clean South African Eucalyptus Seed now available at UTGA @ UGX 20,000 per gm for Members and UGX 32,500 per gm for Non-Members


Improved F2 Pine Seed from Brazil now available at UTGA @ UGX 3.2million per kg for Members and 3.5million per kg for Non-Members. Order while it lasts.

SEEDLINGS FROM FERDSULT ENGINEERING SERVICES LTD


Quality seedlings are now available at very attractive prices:




Pine seedlings (Caribae-Brazil) @ 420/=



Clonal Eucalyptus seedlings @ 500/=




Seedlings of grafted oranges @ 1,800/=



Seedlings of grafted mangoes @ 2,000/=

The nurseries are located 8 kilometers off Jinja road in Luwombo-Lugazi Buikwe District. For more information and booking please visit our office: Plot 17/19 Kampala Road, 7th & 8th floors, Diamond Trust Building or contact: Project Manager on tel: 0772 474431/0701 474431



FERDSULT
ENGINEERING SERVICES LTD
(Always Innovating)

EUCALYPTUS: controversial or misunderstood



FINAL PRODUCT: Treated Eucalyptus transmission poles at a log yard ready for sale

crops. This however does not imply that it is the primary reason for water reduction on sites where it is planted. Research has shown that most of the moisture reduction on sites where eucalyptus is grown is attributed to a combination of edaphic factors including soil texture and environmental conditions.

Soil water taken up by plants is replenished through the water cycle in which plants release it through transpiration and when they are harvested. Since Eucalyptus takes it up and retains it more than it releases it, there is a tendency to think that it depletes the soil water. This would be a disadvantage in situations where the species has to compete with other crops for the same water and nutrients on the same site. Where eucalyptus is planted as a monocrop, this should not be a problem. The soil water is replenished naturally after harvest and this could be accelerated through cultural practices like fallowing. Additionally, while the trees may take up much

water than other land uses, they increase useful water yield by increasing dry season stream flow and reducing reservoir sedimentation.

Eucalyptus and nutrient uptake
Although eucalyptus takes up nutrients at a relatively higher rate especially during its early growth stages it is NOT true that it necessarily removes more nutrients from the soil than other plants. For example over the same period as the eucalyptus rotation; The amount of nitrogen taken in by a cereal crop like maize is 2.5 times more than that taken up by a Eucalyptus plantation of the same area.

The amount of phosphorus taken up by a cereal crop is 15 times more than a Eucalyptus plantation.

Eucalyptus and food crops
Because of their fast growth Eucalyptus out competes other plants and is therefore not a suitable agroforestry genus. If it must be grown with crops, alley cropping

should be used where you have rows of crops followed by rows of trees. It however works as a good shelter belt for farmlands.

Eucalyptus and people
One of the most important reasons for introducing fast growing exotic tree species into rural areas is to help meet the increasing demand for domestic fuel supplies and building poles. Fuel for example in some communities is so scarce that people burn cow dung and agriculture waste for cooking instead of allowing it to contribute to fertility of the soil. Hybrid forms of Eucalyptus consumer much less water than the older ones.

Making the right decisions
In order to make the right decisions, it is important determine whether Eucalyptus plantations are the best land use in an area by analyzing the overall needs of the community for food, fuel, timber, clean water and such important values as wildlife, genetic re-

UTGA appreciates out-gone Board Members



It's generally good practice to thank those that have given selfless service to an organisation when they are leaving. UTGA does this everytime it changes members who have been serving on the Board. On 7th July 2017, Mrs Dorcas Batwala Muhwezi whose services until this year as the Vice chairperson of the UTGA Board were recognised.

From page 9

Eucalyptus

source conservation, recreational sites and then determining the production capacity of the land to the community. In some cases Eucalyptus will not be appropriate while in others, it will be very useful. Eucalyptus will not nor-

mally supply fodder and may utilize relatively of water during its rotation time but will produce more utilizable wood and higher economic benefits than other available species on some sites. Being a vigorous grower, it may require less work and tending than other species to supply the required benefits.

UTGA News is a digital newsletter for the Uganda Timber Growers Association. It is published monthly (once a month) to briefly summarize recent forestry-related publications, projects, activities, and news.

Do you have news, content, or ideas that you want to share in upcoming newsletters? Please send us your segments on articles and opinions on your organization, partnership, project, group, field stories, successes, challenges, fact sheets,

papers, books, guides, or other resources, upcoming or past events.

UTGA News is a great way to reach a wide audience of foresters, natural resource persons, practitioners, scientists and the publics across the Uganda, East Africa and across the globe. If you have friends (*of forestry*) or anyone you think will benefit if they receive UTGA News, please send their email addresses to dennisk@utga.ug.

NOTICE

ANNUAL FEES

Members with unpaid subscription fees are reminded to send them by CASH/CHEQUE to office, Mobile money to 0785343564 or 0703343565 or you can make a bank deposit- please call the office

NFA LAND APPLICATIONS

The deadline to hand in applications for land in Central Forest Reserves has been extended to 31/Aug/17

RAINS, RAINS

The rains are her now!

Preparations for planting include:-

Clearing of land

Burning the rubbish

Booking for seedlings

Approaching the contractor

Contacting other external suppliers e.g. for chemicals, herbicides

FOR ANY SERVICES

Please get in touch with the UTGA office by calling **0785-343564** or by sending an email to info@utga.ug or caroln@utga.ug or peterm@utga.ug

Conclusion

The benefits of growing Eucalyptus to people and the economy in terms of forest provision of products in a shorter time frame vis-à-vis other land uses outweighs the disadvantages of its propagation. Therefore the notion related to eucalyptus planting especially for commercial purposes should be given good thought and technical explanations sought to inform rational decision making.

Contact: Uganda Timber Growers Association (UTGA)
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Website: www.utga.ug

This newsletter is a product of UTGA with support from the Government of Norway

