



UTGA NEWS

7th February 2014

No.25

UTGA would like to invite its Members in the Victoria Cluster to a forest day on 20/Feb/2014 in Kasaala CFR in Mukono District. The theme of the day is "Importance of forest planning & timely thinning." Call 0785-343564 for details.

Ugandan Foresters Visit South Africa

Lessons From Commercial Forestry Country To Help Spur Sector In Uganda



Mother plants used for clonal pines



Shoots of clonal pines at potting



Wood is extensively used to construct houses that are of high value

The UTGA General Manager joined an inter Ministerial Commercial Forestry Sector study tour to South Africa in December 2013. The Ugandan plantation forestry sector is growing and there is an increasing need to gain knowledge about threats from fire, pests and diseases, as well as market development.

Fire Hazard

In 2011, about 500ha were reportedly lost to uncontrolled fires in Uganda. In 2012, more than 1,786ha of plantations were re-

corded to have been burnt, despite an increase in fire protection measures. In 2013, Uganda Timber Growers Association (UTGA) recorded 366ha of Members plantations damaged by fires. There is a clear need for the forestry sector to improve on wildfire management.

An increasing volume of timber and timber products are entering the Ugandan market annually. Some of these timber products harbour pests and diseases that can easily spread in Uganda given the absence of natural predators. Quarantine measures need to be enforced to protect

Uganda's forestry sector.

The commercial forestry sector in Uganda has planted about 65,000ha of forest plantations over the past decade. A significant increase of timber is expected to be available in the Uganda timber market in the short- and medium-term. The timber from recent plantation establishment in Uganda is expected to be of higher quality than timber coming from other countries, due to high quality planting materials and timely establishment and tending practices. The need for the Ugandan government to protect

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Commercial Forestry Study Tour to S. Africa

the forestry sector from poor quality timber imports cannot be over-emphasised.

Being aware of the above threats to the forestry sector, the Ministry of Finance and Economic Planning conducted a joint ministerial and forest sector study tour to South Africa from 1st to 13th December 2013 for the following participants:

- Racheal Musoke, FSSD
- Margaret Adata, FSSD
- Denis Mutaryebwa, NFA
- Michael Mugisa, NFA
- Wahab Ssesimba, MoF
- Dennis Kavuma, UTGA
- Walter Mapanda, SPCS

Purpose of the Study Tour

The purpose of the Study Tour was to acquire knowledge from the well-developed commercial forestry sector in South Africa. The emphasis of the Study Tour was on fire management, pest and disease management and market protection in the commercial forestry sector.

Fire History in South Africa

Uganda is not the only country that has had a difficult time with uncontrolled forest fires. South Africa loses an average of 10,000 ha of planted forest each year. Between 2006 and 2008 a total of 60,000 ha were burned by wildfires. In the same period, Swaziland lost about 40,000 ha of plantation forests to fires. South Africa has learned from its past mistakes however. The country has active Fire Fight-

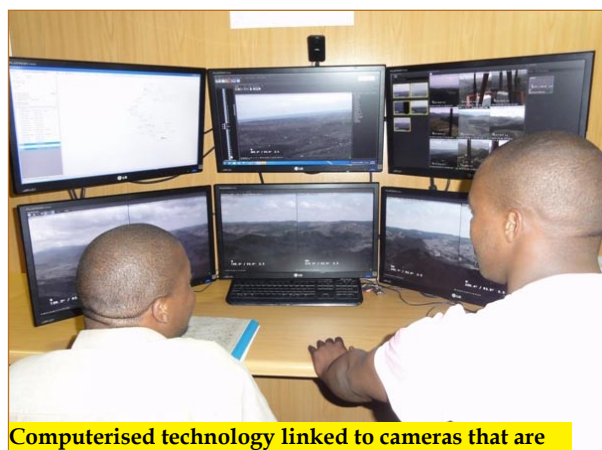
ing Associations (FFA) for aerial fire-fighting, Fire Teams for on the ground fire-fighting and Fire Protection Associations (FPA) for coordinating fire management activities in different regions. Both South Africa and Swaziland have adopted Electronic Fire Detection systems that are cost-efficient in the long run and have proven to be effective for detecting fires.

Unlike manual fire detection system, electronic Fire Detection systems are compatible with the internet and Geographical Information System (GIS).

The team engaged and is grateful to Goodman Gcaba and Ben Bothma from SAFCOL, Johan Bothma from Sappi, Jolanda Roux from FABI, University of Pretoria, Marius Brundyn and Alvis Azwinndini from the Department of Agriculture, Forestry and Fisheries, Gavin Hough, Dennis and Adrian Daniel from EVS. UTGA has made highlights of the observations made during the trip and made recommendations on fire management, pests & diseases, nursery management and wood processing and will relay these in subsequent issues.



The Boardroom at FABI was specially designed using high grade poles



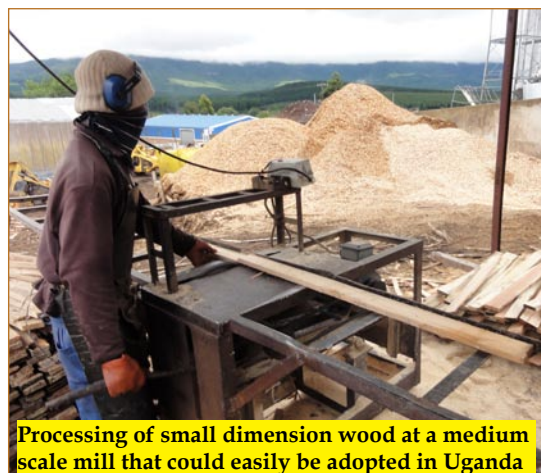
Computerised technology linked to cameras that are used to monitor smoke and fire over a distance of 8km



Eucalyptus logs being processed for use in the mining industry



The auditorium at FABI also has wood-finished walls and doors



Processing of small dimension wood at a medium scale mill that could easily be adopted in Uganda

Financial Planning of Forest Operations

Quality Standards



A poorly maintained plantation with weeds and limited pruning and thinning

SPGS QUALITY STANDARDS PLANTATION ESTABLISHMENT AND MAINTENANCE STANDARDS		
Activity	Standard	Not Acceptable
Site Selection	• Suitable site according to the site requirements of the species	• Wetland areas • Swampy areas • Riverine areas • Steep slopes • High biodiversity areas, e.g. grassland • Sensitive forests
Land clearing	• All weeds should be removed at least 5m away from roads • Weeds removal should be the finished, closed to use • No single weed or clump within the ground • Weeds should be scattered in the compartment and/or burnt • Residual stumps should be lower than 20cm	• Clearing of non-sustainable land types to avoid about • Avoid species of slow rate conservation areas • Many standing trees
Land preparation (Liming not included)	• Correct spacing of 3 x 3 m for pine and acacia/teak up and as recommended by SPGS for other species • All pits should be in a straight line • Sites should be corrected for an area tolerance > 20% • Top level should be constant around the pit • The pit should be dug in the centre of the cleared area • The width of 20 cm for 10m and 20cm wide	
Pre-planting spraying	• Weeds should be kept below 10cm in height before being sprayed • Weeds should be sprayed before they set seeds • Weeds should be sprayed at a constant concentration • The concentration should not be less than 400g/l • Weeds should be sprayed at least 20% of the area	
Planting material	• Seedlings should be from SPGS partner nurseries • Seedlings should be healthy and actively growing plants • Short root ratio of seedlings should be < 1:1 • Presence of mycorrhiza if in case of pine seedlings • Single seedling container of 1 litre • Root collar diameter 2 mm for Eucalyptus and 3 mm for Pine • Size of 10-20 cm tall from the root collar • Root collar not black, firm to the touch	• Damaged, about dying and past infected • Seedlings • Root collar • Root collar diameter • Damaged seedlings
Planting and banking seedling	• Seedlings should be planted upright in the centre of the pit • Planting pit should be 10cm wide and 1 metre long • Plants should be planted to 2cm above the soil level of planting point • At least 80% survival • Banking should be done within 1 month of planting and using the same seedling stock as planter	• Polythene bag in planting pit or field • Weeds or stumps around the plant • Plants within 50cm radius of plant • Soil heaped around the plant
Manual weeding (Start weeding and weeding)	• All weeds within 1 metre diameter from the tree should be removed • Strip-weed should be < 20cm in height	• Cultivation of the soil around the tree • Damage to trees
Pruning	• Trees should be pruned free up to a stem diameter of 10 cm or 7 cm height • Branches should be > 25% of the tree crown • Branches should be ground flush with the stem • Pruning should be done at least 1 m to the compartment • Weeds should be removed away from residual stands	• Dead branches more than 7 cm • Branch stubs or "coal" parts • > 20% of crown height remaining • Healing of branches • Damage to main stem • Damaged stands • Weeds in close proximity to trees
Thinning	• Residual basal area per hectare is between 13-27%	• Dead area > 20% • Damage to residual trees • Change in 10m from ground level • Competition stress • Large gaps between gaps in crown • High loss of "retain" trees

Quality forest management practices are essential for achieving fast growing, high yielding plantations and high quality timber. In Uganda, SPGS/UTGA members' plantations are known for their high quality. Considering that SPGS grants are paid after growers have proved their compliance

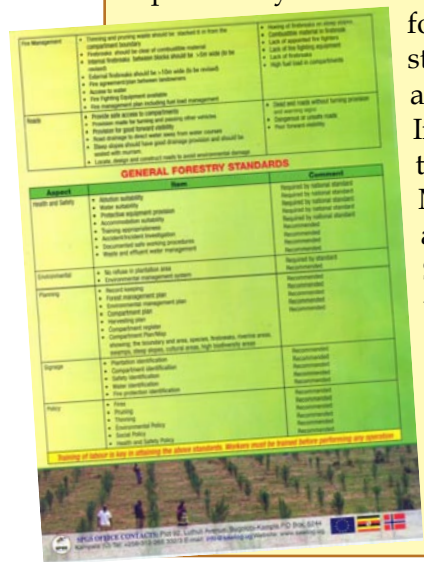
During recent visits to member's plantations, technical staffs have noted problems with the implementation of standards and guidelines. On most occasions members have indicated lack of funds as the primary reason for the poor or delayed silvicultural practices. The second reason quoted is the lack of suitable numbers of quality and skilled labour/contractors. The problem of labour needs special attention and is scheduled for attention. Financial planning goes hand in hand with the physical requirements of the plantation. These physical requirements are largely determined by growth and weather. Understanding the needs of the plantation is the starting point of financial management. The needs of the plantation for certain activities are normally consolidated into an Annual Plan of Operations (APO). The APO highlights the activities, areas and timing of operations. The APO then feeds into the budget and finally into a cashflow plan. Many growers do not have an APO which indicates that many growers do

not have a budget, nor do they have a cashflow plan. Growers are therefore not able to plan for the financial demands and as a result many activities are neglected or delayed. It is almost impossible to explain the financial implications of delayed or neglected activities to all the members on an individual basis. As an example, delayed thinnings have a compounding, negative, long term impact on profitability. Similarly, the impact of poor weeding practices has a negative effect on growth as well as on tree quality. Delays and neglect affect the profitability and viability of the plantations. Being fully aware of the cash flow requirements allows for effective and efficient operations and in the case of cash flow limitations, the Growers can take informed decisions and prioritise activities. UTGA is prepared to host a workshop on APO's, budgeting and cashflow planning for its members. Members are requested to express interest to the UTGA office and arrange-

to a set of standards, information that improves the chances of getting the grant, becomes important. The attached flyer provides an overview of plantation forest development quality standards with a focus on establishment and maintenance standards. The focus is on providing tree growers with information that will assist them to judge quality of work before paying workers or contractors. To help clarify the standards, issues that are not acceptable are also listed. Tree Planting Guidelines for Uganda provides more details including pictures on some standards. The following people have the responsibility to ensure that

forest standards are met: Investors, Managers, Supervisors, Contractors and Workers.

UTGA would like to thank all its Members for paying their subscription fees for 2013 and to kindly inform that invoices for 2014 have been prepared and are being dispatched. In case of those that want to pay, please call 0785-343564 and we will get to you immediately



Productivity

Uganda's private forestry sector is growing at a rapid pace. Since 2004 private investors have planted over 40 000 hectares of plantation forests.

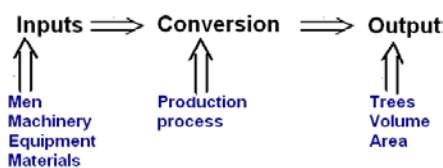
Although Uganda has the fastest plantation development rate in East Africa, the productivity of most of its private tree growers (Small to Medium) is far below that of its competitors in Southern Africa. For the large planters, productivities tend to compare very well with the industry norm. Silvicultural operations are many and labour intensive. Labour rates have been steadily increasing from UGX 4 000 in 2004 to over UGX 10 000 in 2013 cost per unit of labour (labour rate per day) whilst output, per small to medium scale plantation worker, has remained lower than expected.

It is important to know what productivity is and how it can be improved. To appreciate the importance of productivity, a comparison will be made between Uganda and other countries in East and Southern Africa.

Productivity is a ratio of output to input as shown below:

$$\text{Productivity (SRP)} = \frac{\text{Output in Units or Value}}{\text{Input of each Resource}}$$

Productivity can be demonstrated in a conceptual diagramme as shown below:



Input resources consist of a group or individual units. In forestry, a worker is referred to as a Manday if he or she works for 8 to 9 hours per day at a reasonable pace. Mandays are a measure of how much of labour a particular resource has been used. Examples are shown in table below:

Activity	Mandays/Ha	Task	Units
Pre-plant Chemical Weed Control	2	5000	m2
Marking and pitting	7	159	pits
Planting	4	278	trees



It is very important for investors to look critically at productivity because it links directly with the efficiency of operations in the farm

Productivity indicates how effectively and efficiently the input resources of an organization are used to produce outputs. Productivity enables us to:

- establish our level of competence in performance management
- compare with the international or company, operation or Industry norm

Below is a comparison of productivities for large scale forest operations in Uganda, South Africa and Zimbabwe.

Country	PRODUCTIVITY		
	UG	SA	ZIM
Productivity	Units /Ha		
Operation			
Land clearing	18.0	NA	8.9
Land preparation (Slash Burning)	4.2	1.0	4
Preplant spraying	2.4	2.0	1.5
Marking & Pitting	8.4	7.0	6.71
Planting	4.8	5.0	5.2
Blanking	2.4	2.0	1.4
Post Plant Manual Weeding (Ring Hoeing)	4.2	4.5	4
Post Plant Manual Weeding (Slashing)	4.8	4.0	4.4
Post Plant Chemical Weeding	4.8	2.0	2
Tending Manual Weeding (Slashing)	4.8	4.0	5
Tending Chemical Weeding	2.4	2.0	2
1st Pruning	4.8	6.0	3.7
2nd Pruning	4.8	5.0	3.8
3rd Pruning	5.0	7.0	3.8
Marking for thinning	3.0	0	1
Thinning control	0.4	0.3	0.2
1st Thinning (to 700 spha)	9.6	8	7

Note NA means Not Available

Ugandan figures are derived from Tree Planting Guideline for Uganda

Once a ratio established we can then consider improving it. For example, trees /manday, m3/ skidder, trees/ chainsaw, tons/hour. Productivity in Uganda can be

Productivity

improved by one or more of the following actions:

- Increasing input a bit resulting in a greater increase in output
- Maintaining constant input but increase output
- Decreasing input a lot resulting in a smaller decrease in output
- Decreasing input but maintaining output
- Decreasing input but increasing output

In addition to the above, managers and supervisors should manage their workers through the following:

- Insisting on time keeping
- Having clear team structure
- Insisting on team discipline
- Providing measurable tasks
- Providing achievable and realistic tasks
- Awarding fair wages to employees
- Concerned about employee welfare
- Insist on quality standards
- Provide workers with appropriate tools and tool maintenance facility
- Provide workers with training
- Provide workers with communication means
- Order resources on time
- Transport workers
- Screen workers and place accordingly.
- Measure output regularly (Hourly, daily weekly)
- Provide Work Programmes a month before operation

Our hope is that forest managers and supervisors are going to better manage the inputs including labour in order to increase productivities in Uganda. Productivity alone is not enough, managers must take quality, safety and overall cost into consideration.



UTGA Programme Officer Irene Nakigudde supported by the Chief Technical Advisor (CTA) and Plantation Technical Advisor (PTA) offer advice at a Members plantation

UTGA FIELD INSPECTIONS

One of UTGA's main goals is to assist its members to establish, maintain and harvest profitably from plantations. It also looks to contribute to establish a profitable, efficient and fully fledged Ugandan commercial forestry industry. In order to achieve this, UTGA has started to reach out to individual investors where a team from the Secretariat including a TA visit the farmer at his/her plantation to offer advice on a whole range of issues about what they see in the plantation that is good and areas about which there is need for improvement.

Aspects that need improvement
However, during the few field visits so far made, there is evidence

indicating that thinning and pruning are still wanting with many planters.

It has also been noted that members and their plantation managers still lack adequate skill and knowledge on how to determine thinning/pruning readiness as well as carrying out the recommended extraction methods. In order to meet this challenge, UTGA has incorporated thinning/pruning field trainings in its Annual workplan. Therefore, this is to call upon members with such a need to contact the Secretariat for this service. Even if this service currently is free, in the near future it will be cost-shared between UTGA and those that require it.

ORDERING FOR PINE SEED

The UTGA Secretariat is currently receiving orders for Pine Seed. Please make your booking now by calling 0785-343564

UTGA is in the process of developing markets for Members wood. To do this effectively, the office requires information from the Members on location, species planted, acreage and age. Please forward this info as soon as you can. Thanks

UTGA News is a digital newsletter for the Uganda Timber Growers Association. It is published semimonthly (twice 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 public 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.

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