



# Newsletter

**Sawlog Production Grant Scheme**  
*Forests for Sustainable Development and Improved Livelihoods*

April - June 2017



**Food and Agriculture  
Organization of the  
United Nations**



**EUROPEAN UNION**



**GOVERNMENT OF UGANDA**



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**Cover photo:** Processed timber from the forest of a beneficiary of SPGS.

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the end of June 2017, 12 000 (hectares) had been planted by grantees of the project, out of a target of 30,000 hectares to be realized by 2020.

The value of forests in an economy cannot be overstated. Therefore I applaud the Government of Uganda for supporting the project. It however remains a fact that there is increasing pressure on natural resources such as forests, potentially limiting their contribution to improving livelihoods. For instance, the high population growth rate is forcing people to encroach on both private and state-owned forests, for

settlement or agriculture. Pests, heavy reliance on charcoal and fire wood as sources of energy, and the long, dry seasons which increase the occurrence of forest fires have also exacerbated the problem of deforestation.

FAO is committed to fostering a vibrant forestry sector by enabling access to high quality tree seedlings, providing timely technical advice to tree growers, increasing the contribution of research in the forestry sector, and generating information that will increase the contribution of the forestry sector in Uganda to foster achievement of the Sustainable Development Goals, particularly in regard to climate change mitigation, ending hunger, and eliminating poverty.

In this issue of the newsletter, read about FAO's collaborations with various stakeholders and forestry sector players who are supporting SPGS III, FAO's tree planting interventions in Karamoja. Also enjoy learning more about: demystifying myths about *eucalyptus* trees, FAO's support to communities through establishment of woodlots, how UNOPS is supporting grant management as well as management and control of forest fires.

Enjoy your reading!

**Alhaji M. Jallow | FAO Country Representative**

# FOREWORD

Dear Esteemed Readers,

I warmly welcome you to this second issue of the project's quarterly newsletter and congratulate the SPGS III team on this achievement.

FAO implements SPGS III on behalf of the Government of Uganda, with funding from the European Union. FAO is impressed with the work done so far and we are optimistic that the Project will make great strides in achieving its goal of increasing incomes of rural people through commercial tree planting and value addition by private sector players, while mitigating climate change. I therefore recognize all the stakeholders, including you our readers, for the commitment to making SPGS III beneficial to Ugandans and to the country.

According to the State of Uganda's Forestry 2016, published by the Ministry of Water and Environment, forest cover in Uganda has shrunk from 24 percent (4.9million hectares) of the total land area in 1990 to 9 percent (1.8million hectares) in 2015; implying that 3.05million hectares were lost in a period of 25 years. The biggest loss in forest cover was from privately-owned forests. I have no doubt therefore that SPGS III is very timely, as it strives to promote intensive afforestation by the private sector, in the hope of increasing the forest cover in Uganda. By

# Ministry of Water and Environment Lauds FAO for Boosting Commercial Forestry In Uganda



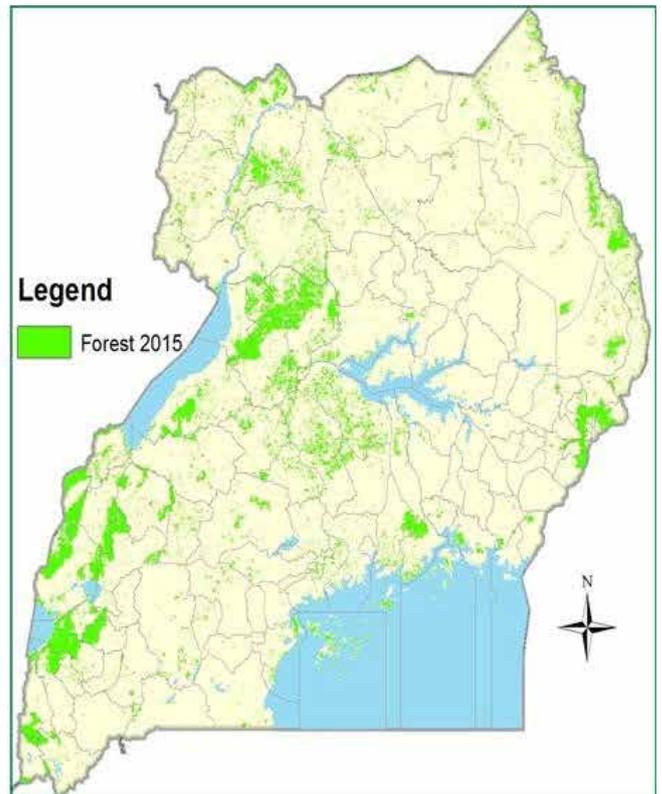
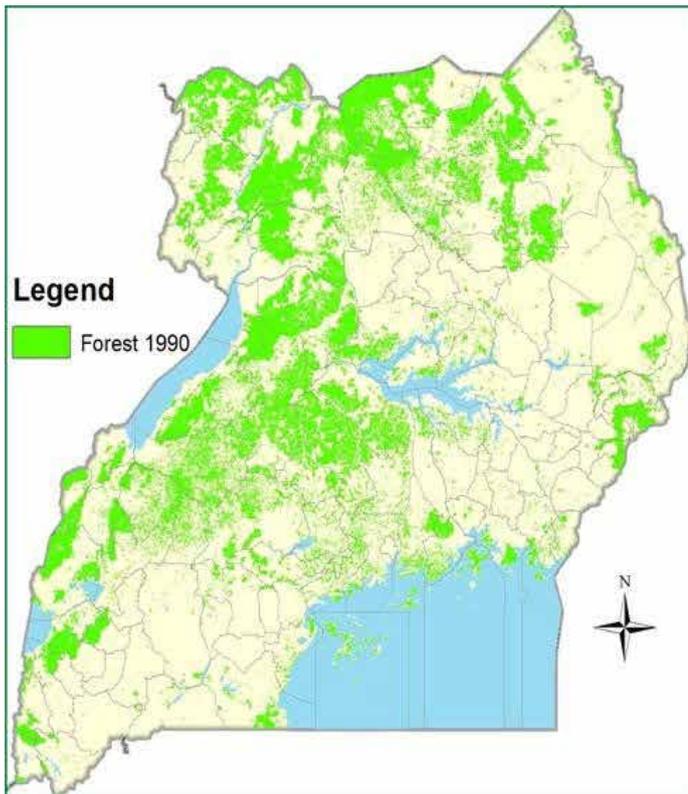
**Mr. Alfred Okot Okidi-**  
**Permanent Secretary, Ministry**  
**of Water and Environment**

FAO, through SPGS III, is supporting the Government of Uganda to promote commercial forestry and intensive afforestation. Mr. Alfred Okot Okidi, Permanent Secretary in the Ministry of Water and Environment, explains the state of forestry in Uganda and interventions to boost the sector.

## **Q. What is the state of forestry in Uganda?**

**A.** Since 1990, almost 30 percent of the forest cover in Uganda has been lost, mostly in forests under management of districts, in privately owned forests,

and in the Central Forest Reserve. This is mainly caused by pressure from agriculture, energy, and timber for construction purposes. With increasing awareness and public concern, many people now appreciate the importance of forests and conservation. I applaud the Government of Uganda, led by His Excellency President Museveni, for strongly advocating for reforestation and cancellation of titles in forests and forest reserves. Nonetheless, a lot of investment is required in terms of provision of seedlings, creation of awareness and adopting energy-efficient cooking methods.



*Images showing Uganda's forest cover between 1990 and 2015*

**Q. How is commercial forestry contributing to reversing loss in loss of forest cover?**

**A.** Commercial tree growing in Uganda has gained momentum over the past few years. The SPGS III project is targeting commercial farmers to realize 30000 hectares of planted forests and so far the project is making tremendous progress. For the second year running, there has been over-subscription in terms of requests for seedlings through FAO/SPGS III and I believe the project is doing extremely well in promoting commercial tree growing. Private sector tree growers, through their association- Uganda Timber Growers Association (UTGA) are very active and I thank FAO for supporting UTGA.

**“ As citizens of Uganda, it’s our responsibility to protect the environment. I appeal to Ugandans to guard these limited and finite resources jealously. If one family can plant at least five trees every year, we shall see a big increase in forest cover and reduced effects of climate change. Fellow countrymen, let us plant trees. ”**

Alfred Okot Okidi, Permanent Secretary,  
Ministry of Water and Environment

**Q. What are Government’s plans to increase forest cover?**

**A.** Through the National Forestry Authority (NFA) and the Forest Sector Support Department of the Ministry, Government is providing tree seedlings to communities and the private sector. Annually, for the next 10 years, we plan to plant 100million trees to increase forest cover. To meet the growing demand for seedlings, we are encouraging private entities, particularly certified tree nurseries, to provide high quality seedlings. Am grateful to FAO/ SPGS III project for implementing its tree nursery certification exercise and ensuring that nursery operators adhere to acceptable quality standards. The Ministry also holds four national tree planting days annually to promote public participation in tree planting. The Ministry is strengthening monitoring to enforce national regulations and district level ordinances. Finally, we have embarked on demarcating the boundaries of all forests and increased public sensitization on sustainable use of forests so that communities can benefit from and protect forests.

**Q. How do you think commercial forestry will help to alleviate poverty and improve livelihoods?**

**A.** Forestry is an investment and rural communities stand to benefit tremendously by participating in reforestation activities; right from the planting stage to the harvesting stage. Forestry is an income-generating activity and with proper guidance and support, Ugandans will soon realize quality timber that can attract good prices for local communities. Thanks to the Government’s new strategy- Buy Uganda, Build Uganda, to promote consumption of locally manufactured products, local market will be readily available. There will be more value addition to forest products and this will help to raise incomes for rural communities. Many rural jobs are created both in forest plantations, support industries such as nurseries and there is potential for many more in processing and value addition.

**Q. Comment on Uganda’s local and regional trade in timber.**

**A.** Timber trade in Uganda is growing but there are challenges with illegal and often immature timber that is sold on the market. Enforcement at district level is wanting and is compounded by fact that they are grossly underfunded. The ministry plans to establish a traceability system to verify all transactions in and movement of timber. Tree growers, traders, and manufacturers will be engaged in developing a well-organized structure for timber trade. Through this system, we shall promote self-enforcement and self-regulation within the timber industry, by end of 2017.

# FAO to Promote Dryland Forestry in Karamoja Region



**T**he Karamoja region of Uganda is witnessing unprecedented population growth which has resulted in pressure on forests for forest products such as timber for construction and wood for fuel. The increased demand for fuelwood has created scarcity and forced the population to encroach on natural forests. Furthermore, Karamoja has sparse vegetation and few natural forests that cannot sustainably meet these demands, especially since the region is located in one of the “dry belt” areas of Uganda. Consequently, few tree plantation development projects have been implemented in Karamoja and yet the region has potential for dry land forestry growth. It has species with ability to produce six to ten cubic metres per hectare per year compared to the low yield from natural forests in such dry land areas.

Following recommendation by the Project’s Steering Committee, FAO, through SPGS III is implementing affirmative action approach aimed at introducing and promoting commercial tree planting for timber and production of transmission poles in the region, provision of financial grants and technical support to tree farmers. The project targets planting 1000 hectares (equivalent to over one million tree seedlings). Other interventions include: creating awareness in the region about commercial forestry and its benefits, enhancing skills in commercial forestry and procedures through practical field-based trainings and field visits, and transfer of appropriate technologies for better and faster results.

A total of 50 private growers in Karamoja region applied for grant support and 36 were shortlisted. Their sites will be inspected and assessed for suitability before they

can sign grant support agreements to establish timber plantations in 2018. Grantees will be guided to select tree species from a set of seven species recommended by FAO/SPGS III because they can thrive in dry land areas and have high commercial value. These include: GC eucalyptus clones, *Tectona grandis*, *Markhamia lutea*, *Exotic mvule (Bathedavia)*, *Melia volkensii*, *Grevillea robusta*, and *Gmelina arborea*.

The FAO/SPGS III approach for Karamoja is guided by experiences and lessons drawn from interventions during the previous SPGS project phases in the region. These include:

- Potential for tree growth in the wetter belts of the Karamoja region. Through appropriate selection of species and accurate site species matching, fair productivity can be achieved.
- Although the major economic activity in Karamoja is cattle rearing, over the years, the local population has developed interest in tree plantation development.
- Communities in Karamoja more than ever, appreciate planting of trees due to need for wood products and awareness of climate change impacts.
- The population in Karamoja has more limited knowledge and skills in tree plantation establishment; which if addressed, will enhance quality standards in commercial tree planting.
- Animals and wild fires are a major threat to tree plantation development in Karamoja but can be effectively managed through public sensitization and empowering investors with appropriate skills to manage forest/wild fires.

**By Nelly Grace Bedijo- Programme Associate, FAO/SPGS III and Stella Maris Apili- Programme Assistant, FAO/SPGS III**

# SPGS III Showcased at European Development Day in Brussels



**Evelyn Ninsiima stands next to the SPGS III poster exhibited at EU Day in Brussels**

European Development Days (EDD) is Europe's leading forum on development, bringing together members of the development community to share ideas and experiences, knowledge, lessons, and to discuss and showcase achievements.

The 2017 EDD focused on the international community's strategic response to some of the most pressing global challenges, including engaging the private sector in economic development. The SPGS project was showcased as one of the flagship projects of the European Union. The SPGS model has been widely appreciated as a successful Public- Private Partnership that has achieved results in promoting commercial tree planting in Uganda.

During Phase I & II (2004- 2015), the project supported over 500 small, medium and large scale land holders to plant 47 000 ha of tree plantations, with support from the European Union. SPGS III has a target to support an additional planting of 32 000 ha by 2020.

Ms. Evelyn Ninsiima, a beneficiary of SPGS represented the project at the 2017 EDD in Brussels to tell the SPGS story. She's shares her experience.

During the European Development Days (EDD) 2017 celebrations held on 7-8 June 2017 in Brussels, Belgium, delegates commended the EU and FAO for promoting commercial forestry in Uganda. In order to reduce deforestation and destruction of natural forest resources, which are habitats for diverse flora and fauna, FAO/SPGS III promotes fast growing tree species of,

*eucalyptus grandis*, Teak, and indigenous species like *Maesopsis eminii* (*Musizi*). Importantly, commercial forestry in Uganda has boosted rural incomes and livelihoods as many tree farmers from the informal and formal sectors are employed in the sector. As a beneficiary of SPGS, I was excited to attend the event and take part in the FAO/SPGS III exhibition under the theme: "Ready, Set, Grow: Supporting communities through tree planting in Uganda". The EDD 2017 celebrations provided a platform for attendees to share global views on commercial forestry investment. It was noted that while exotic trees grow fast and achieve the primary objective of increasing tree growth in Uganda, planting indigenous tree species should also be promoted.

I was able to share the experience of how FAO/SPGS III is working with the private sector through Uganda Timber Growers' Association (UTGA), to identify local, regional, and international market for the sawlog products. Additionally, Uganda is implementing an inward looking trade policy- Buy Uganda, Build Uganda (BUBU) by which Government is promoting consumption of locally produced goods and services through public service and private companies.

From a global perspective, in order for commercial forestry to effectively compete with the international market, commercial investors at the small, medium and large scales, should add value to forest products. This will ensure a sustainable forestry value chain on the global market. To penetrate the global market therefore, Uganda's tree growers are encouraged to carry out timely silviculture operations for production of quality commercial forestry products. To achieve sustainable commercial forestry, at all levels stakeholders: local, regional and national, should be involved in tree planting activities and high quality of forest products should be emphasized.

**By Evelyn Ninsiima-, SPGS Beneficiary and Founder, Green Environment Promotion (GEP)**

# SPGS III Starts Tree Nursery Certification Exercise

**G**ood quality seedlings is a foundation for fast-growing and high-yielding plantations; giving tree farmers good profits on their investment in the shortest possible time. Consequently, SPGS III is implementing a voluntary, private nursery accreditation scheme, in which participating nurseries are audited and given certification based on compliance with a set of quality standards which include: use of improved seed/ hybrid cuttings, production of quality planting material and production practices which are technically, economically, socially and environmentally sound. Additionally, a participating nursery should have the capacity to raise at least 100 000 high quality seedlings in one season and should use seeds obtained from an FAO/ SPGS III recommended sources.

The nursery accreditation system ensures that tree growers have access to high quality planting material in order to benefit from healthy and productive plantations. As such, FAO/SPGS III emphasizes that all grant applicants and people involved in commercial forestry, source their planting materials from certified nurseries. Through the tree nursery certification exercises, the SPGS III team also provides technical advice and assistance to nursery operators and basic training in nursery operations.

By June 2017, 117 nurseries had been inspected but only 66 nurseries qualified for certification. Of these, 41 produce Clonal Eucalyptus seedlings. During the certification exercise, a number of shortcomings in operations of some nurseries were noted, explaining the small low number of accredited nurseries. Challenges included: poor management of pests and disease, limited record keeping as many failed to provide information on source of the seed planted, and establishment of nurseries in wetlands or areas with poor drainage. All

applicants were notified of these problems and received and continue to receive technical advice from FAO/SPGS III, so that they can make another attempt at certification once their standards improve in the next exercise which is planned for the last quarter of 2017.

## **New species for Karamoja**

SPGS III is carrying out affirmative action to promote commercial tree growing in Karamoja region, targeting planting of over one million tree seedlings on 1 000ha. To suit the region's semi- arid climate, the Project is promoting growing of the following tree species for timber and production of transmission poles: *Markhamia lutea*, *Exotic Mvule (Bathedavia)*, *Melia volkensii*, *Grevillea robusta*, *Tectona grandis*, *Gmelina arborea* and Eucalyptus hybrid clones (Grandis x Camaldulensis). SPGS III will also encourage more tree nurseries in the area to raise these species in time for the March/April 2018 planting season.

So far, the SPGS III team has identified tree nurseries with capacity to produce quality planting material and will carry out a pre-audit exercise to ensure that they comply with recommended standards for certification. The team is currently working with Uganda Timber Growers' Association (UTGA) and National Forestry Authority (NFA) to ensure availability of improved seed which will be supplied to nurseries that will produce planting material in time for the March/April planting season.

## **Seed update**

NFA's National Tree Seed Centre has in stock 50kg of PCH Brazil (F2) at UGX 4 000 000 per kg, *Pinus Patula* at UGX 700 000 per kg and *Eucalyptus grandis* from local seed at UGX 300 000 per kg.

*By Francis Ssali- Programme Assistant, FAO/SPGS III*



# SPGS III Conducts Training to Enhance Forestry Operational Efficiency

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*Participants planting a tree seedling during a training session*

**T**raining is important globally for imparting necessary forestry skills and fostering compliance with the set operational standards, for operational efficiency and ultimately lower production costs. During this phase of the project, over 500 tree farmers will be supported to establish over 25,000 hectares of commercial tree plantations. A big proportion of these are new to the forestry business and have limited technical knowledge. To bridge the gap, FAO/SPGS III rolled out a training programme at the start of the project, offering a number of plantation establishment and maintenance courses.

To date, the project has conducted eleven field-based, practical forestry training sessions in the country. These courses targeted various categories of forestry industry players, including: plantation owners/investors, plantations managers and supervisors, forest fire management crews, forest planners, District Officers, supervisors from the National Forestry Authority (NFA) and community groups. So far, a total of 260 people have been trained as presented in the table below:

**Table 1: Practical training courses conducted across SPGS clusters**

COURSE CONTENT	CLUSTER	NO. OF PARTICIPANTS
Development of Forest Management Plans	Central	12
	Karamoja	09
Forest Fire Management	Western	12
Operational Harvest Planning	Albertine	3
Plantation Establishment	Albertine	29
	Central	30
	Eastern	31
	Northern	30
	South Western	29
Teak Silviculture	West Nile	27
Plantation Maintenance	South Western	48
<b>Total</b>		260

### Incorporating gender in FAO/SPGS III training

All training sessions emphasize attendance and participation of women, because women make a significant contribution to sustainability of plantation forests. Already, many women are certified forest contractors and nursery operators. In the eleven recently concluded trainings, of the 260 participants, 40 participants were women (15.4 percent).

SPGS courses are 95 percent practical and field-based, enabling trainees to have more time to learn and practice specific techniques. Each course accommodates a maximum of 30 trainees, determined on a first come- first served basis.

All FAO/SPGS III training courses are facilitated on a cost-sharing basis. Course participants only meet 30 percent of the total training costs to partly cover the cost of accommodation, and meals during the training. . The remaining 70 percent is covered by the FAO/SPGS III project, making the trainings affordable to participants. The average cost for a 4-5 days training course is UGX 170,000/=.

### Basic course requirements

To be eligible for any FAO/SPGS III courses, one must meet the following minimum requirements:

- Be able to speak basic English as the mode of instruction is English
- Must have Personal Protective Equipment (PPE) appropriate for a particular course enrolled for
- Must be in a good health as field-based sessions require physical activity
- Make full payment for the desired course

*By Josephat Kawooya- Programme Associate, FAO/SPGS III*

# Highlights From Field Inspection Exercise



*Stella Maris Apili (right)- Programme Associate, FAO/SPGS III talks to a tree grower during field inspection*

Since it began operations in 2016, the SPGS III Project has so far issued grants to 500 individuals and private companies under the commercial plantation establishment grant, to plant 25 000 hectares of trees. As most of the grantees are new to the field of commercial forestry, the Project supports all grantees by providing technical advice to ensure that plantations are established to acceptable standards, recognizing silvicultural, social, and environmental standards of the Project. During the quarter, the team conducted a countrywide exercise to verify tree plantations established in the first planting season of 2017. Field inspection is conducted at the end of each planting season, to check compliance of planted areas to SPGS III recommended standards, ahead of funds disbursement to grantees. Areas inspected were assessed on the basis of site suitability of planted tree species, tree spacing, survival of planted seedlings, weeding, and age of the crop.

Out of 8 000 hectares reported by the grantees ahead of inspection, 5 000 hectares attained the minimum required standards for acceptable plantations. The SPGS III Technical Team therefore encourages growers to take corrective actions to improve the quality of

plantations. The Project continues to provide technical advice to help growers to achieve high-yielding plantations.

Below are highlights from the inspection and recommendations for grantees who missed the grade:

**Site species matching:** This is done to determine the suitability of tree species to a particular site. Trees, like many crops, grow vigorously if planted on sites with appropriate growth requirements such as a particular soil type. Furthermore, SPGS III recommends growing specific timber tree species as a requirement for funding. However, some tree growers planted different tree species. Additionally, growers are encouraged to use improved seeds for the recommended tree species as these are fast-maturing and high-yielding species.

**Site selection:** A site selection exercise aims at demarcating sections of one's land on which trees can be planted as well as identifying Areas of Special Interest (ASI) and Special Management Zones (SMZs). Sensitive ecosystems such as wetlands and natural forest belts have fundamental ecological roles and should not be replaced with plantations. During the

field inspections however, it was noted that a number of growers had planted trees on marginal areas, including poorly drained sections such as wetlands and/or on very shallow sections. This greatly affected the growth of planted trees. Trees are deep rooted crops that should be planted on deep, freely drained soils with Effective Rooting Depth of one meter. Tree growers are therefore encouraged to carry out environmentally friendly and socially acceptable practices for sustainable operations.

**Land preparation and pre-plant operations:** Some growers planted at the onset of rains and this affected pre-plant operations. In some cases land clearing was haphazardly done while in other cases pre-plant chemical spraying was omitted. As a result, the trees did not grow well as they were competing with overgrown bushes. Other growers made shallow planting pits which affected quality of planting while those who did not carry out proper land preparation had very poor plantations. Although poor land clearing can be corrected at a later stage, poor quality pits cannot be adjusted and such plantations always register very poor survival, as the seedlings fail to mature.

**Quality of planting materials:** The SPGS III Project encourages grantees to use seedlings from certified tree nurseries to ensure quality planting material and good plantations. The Project urges growers not to use seed from unknown origins because their traits and yield performance are not known and cannot be guaranteed. However, some growers planted poor quality overgrown seedlings carried over from the previous planting season. Overgrown seedlings have coiled roots and struggle to mature once planted in the field. Others planted very young seedlings (undersize), especially eucalyptus clones, which failed because they have not been hardened enough for field conditions.

**Quality of planting:** Generally, most growers had commendable quality of planting practices, with the right pit sizes and planting depth for seedlings. However, few cases of shallow planting were observed, especially with the planting of Eucalyptus hybrid clone

cuttings. Shallow planting manifests where the kink on the cuttings is left above the ground. This affects the alignment and growth of the tree and the quality of the first log.

**Timely blanking:** Cases of late blanking resulted in non-uniformity of the crops, especially among Eucalyptus plantings. Blanking should be done within the same planting season, following a survival assessment. Eucalyptus and pine should be blanked within two weeks after planting and after one month respectively.

**Taungya:** Taungya is the practice of intercropping trees with food crops. SPGS III Project strongly discourages this practice because it affects the survival, quality and growth of the trees. However, it was observed that growers mainly in the Central Forest Reserves (CFRs), faced with land encroachment especially by surrounding communities, practiced taungya. The Project therefore appeals to the National Forestry Authority, which governs CFRs, to help the affected growers accordingly.

**Timing and standard of weeding:** Delayed weeding forces the trees to compete with weeds and affects survival, maturity, growth and form of the tree. Tree growers are encouraged to carry out ring weeding around the tree and routine, inter-row slashed weeding and chemical spraying. Importantly, any chemical weeding should be carried out by a well-trained and supervised team as the chemicals can kill the trees if spraying is not done carefully.

**Unpredictable rains:** Due to climate change vagaries, the rains have become more unpredictable, often affecting planting operations. Several tree growers experienced huge losses in terms of low seedling survival, which necessitated numerous gap filling operations. Proper planning is critical to ensure timely planting and use of super absorbents such as aqua soils is encouraged. This could support early planting and allow proper establishment of seedlings before the dry season.

*Article by SPGS III Technical Team*

# Enhancing Transparency and Better Grant Management Through UNOPS



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*UNOPS Project Manager for SPGS III, Ms Sandra Diaz (second from right), with SPGS III Plantation Development Manager, Mr Dennis Mutaryebwa (third from left), Dr Joseph Epodoi (center), focal point for Soroti General Medical Services Limited- SPGS III beneficiary institution and employees at the company's plantation in Soroti District.*

**T**he United Nations Office for Project Services (UNOPS) is supporting SPGS III Project to ensure sound financial governance, using modern and tested tools and processes that will guarantee the project's success. With extensive experience in grant management, UNOPS has a partnership agreement with FAO, through which UNOPS will provide grant and financial management aimed at fostering agreed standards of quality and timeliness in the project's execution.

According to Sandra Diaz, the UNOPS Grant Manager in charge of FAO/SPGS III, UNOPS has developed and is implementing easy-to-follow, stepwise processes leading to issuing of the grants, and will develop modern software to monitor and implement the grants scheme. She notes that UNOPS is helping the grantees to become more aware of the relevant procedures they need to follow in order to access the

grants and to remain compliant with the Scheme. So far, UNOPS has signed 450 Grant Support Agreements (GSAs) with the grantees, after which they will be expected to periodically report and show progress of their plantations in order to access the funds.

After receipt of applications, the FAO/SPGS III team conducted a pre-selection exercise to identify tree planters with minimum requirements. Successful applicants were notified and in a meeting, briefed about their expectations. A grantee's three main obligations are: (i) to plant and maintain his/her plantation, (ii) to report progress and (iii) to allow for inspection. After planting, grantees submit a technical report on the status and size of their plantations, the species planted, and a planting plan. The technical team then carries out inspection and validation of a grantee's plantation. Inspections are carried out after three months and after 10 months post planting.

Upon satisfactory inspection an invoice is prepared and UNOPS releases funds to the grantee.

The grants are non-refundable and are based on a co-investment principle, whereby the grantee invests an amount of money available to them, to establish a plantation and only seeks the grant to supplement his/her available resources. With the additional funding, the grantee may payback any borrowed loans used to establish the plantation or increase the acreage.

UNOPS will also help the project to develop grants management guidelines which can be used in future, to effectively implement and manage grants. An online database will be developed to document all project information, including: storing basic information about grantees (e.g. name, location, size of field

and contact). The database will be easily accessible, enabling grantees to track the status of their applications, upload documents, monitor payments, and keep abreast with relevant timelines.

Furthermore, UNOPS has identified the potential risks and mitigation elements involved in grant management in the project and is developing a Risk Response Matrix to determine measure, prioritize, and classify the risks.

FAO/SPGS III's Project Coordinator- Mr. Leonidas Hitimana notes that: "UNOPS will enhance transparency, reporting, and documentation of project grant support to beneficiaries while improving grant management skills of FAO/SPGS and the Ministry of Water and Environment."

## WHAT GRANTEES HAVE TO SAY ABOUT UNOPS



### **Vincent Bariyanga– Technical Director, Hawk Eye Enterprises Ltd, Central Region**

Signing of the Grant Support Agreement was a good experience, requiring much discipline. The process was systematic and it will reduce delays in release of funds to grantees. Explanations on the contracts and reporting requirements and format were clear.



### **Rose Kaliise, Albertine Region**

The process of acquiring grants is straightforward and easy, thanks to the help of UNOPS. The process and staff are transparent and I am confident that UNOPS and FAO/SPGS III will deliver to our satisfaction. I understand my responsibilities as a grantee.



### **Irene Wyate, Amajo Forest, Serere Petroleum Company Ltd, Eastern Region**

While signing the GSA, I learnt that procedures are very important. The process of getting the grant is transparent and its procedures are strictly followed. My company is grateful to be a beneficiary. The trainings conducted by FAO so far have been good and practical and we have learnt a lot. I encourage more people to engage in tree planting because it's good for the environment, helps to reduce soil erosion and mitigate climate change.

*By Anita Tibasaaga- Communications Assistant, FAO/SPGS III*

# Demystifying Myths About *Eucalyptus*



In Uganda, *Eucalyptus* tree species were first introduced around 1912 to supply fuelwood for railways and administrative centers but also to drain swamps in an attempt to reduce malaria. Today, eucalyptus is grown for a variety of uses, including: fuel for tobacco curing; domestic and industrial energy (e.g. tea and sugar drying, baking, charcoal for steel and cement manufacturing), the provision of posts and poles for fencing and electricity transmission; building mud-and-pole houses; aesthetic use in towns; timber for general construction and for shelter belts in agriculture.

*Eucalyptus*, one of the most planted genera of trees in the world, has been grown in Uganda for over a century and eucalyptus tree growers have gained experience and important indigenous knowledge of its management. The area of *Eucalyptus* plantations has expanded

greatly, so that today this genus dominates many rural and urban landscapes often because it suits the limited resources of smallholder growers and generally yields more revenue than other trees. Increasing demand for fuelwood and timber for construction have created dependable markets for *Eucalyptus* products and contributed to the steady expansion of *eucalyptus* plantations in the country.

While *eucalyptus* remains a crop of economic importance, it has not found that much favor with, environmentalists, together with agriculturists, who often times designate it a foe of the environment. Researchers however urge cautious and fair evaluation of the pros and cons of growing the tree. Some of the contentious issues are:

- Are environment-centered arguments more important than socio-economic benefit?
- Can we identify ways through which the impact (cost or benefit) of each of the plantation species including *eucalyptus* are analyzed?
- By what parameters, or within what contexts, should *eucalyptus* be evaluated?

Some people contend that eucalyptus does not yield quality wood, cannot provide watershed or soil conservation, wildlife habitats, and has limited recreational or aesthetic functions. Other controversies have related to its impact on the environment such as heavy use of soil water, thus affecting streams and underground water, high consumption of soil nutrients, inability to prevent soil erosion, inhibition of growth of other plants in the understory and failure to provide food supplies or adequate habitat for wildlife. The success and widespread cultivation of eucalypts is because of its ability to adapt to varied environments and ecosystems and the ease with which it can be cultivated and managed. Some of its advantages include: availability and easy propagation of seed, relative ease of plantation establishment and maintenance, tolerance in a wide range of environmental conditions, fast growth, and efficient conversion of solar energy, wood of high specific gravity and calorific value, good coppicing ability, exceptional drought-hardiness, good economic returns with high internal rate of return (IRR), un-palatability of its foliage to livestock, tolerance of browsing and relative tolerance to diseases and pests.

Based on the above, decisions should be made case by case, as each could be different and need separate analysis because the environmental impacts vary with site characteristics and intended use. Generally, as long as good management is practiced, including the proper matching of species to site, watershed water limitations and careful Silviculture practices are carried out such as optimal stand density, thinning intensity, species type, rotation age, and the consideration of mixed plantation options, eucalypts can be grown safely.

During FAO/SPGS Phase III, suitable sites for eucalyptus growing will be identified, putting into consideration the tree's effect on water use, special management zones such as swamps and riverine ecosystems, while avoiding areas of high conservation values. Beneficiaries are guided on these aspects.

Majority of the eucalyptus species perform under sites with deep (>1m), fertile and well drained soils, rainfall ranging from 1000-1500mm/year, areas with mean annual temperature ranging from 18-22 degrees Centigrade, prefer cooler climate and does not tolerate severe drought & water logged places.

Current reviewed literature does not provide any valid basis for banning Eucalyptus planting. However, potential detrimental effects of planting eucalyptus should be minimized and benefits optimized.

**By Dennis Mutaryebwa- Plantation Development Manager,  
FAO/SPGSIII**



# FAO Participates in Regional Forest and Landscape Investment Forum



Investing in forestry is profitable business and a variety of investors fund forest restoration. Furthermore, smallholder farmers are key stakeholders in forest restoration but few businesses and investors are tapping into this opportunity. This was one of the key observations noted during the Forest and Landscape Investment Forum (FLIF) held from 16-17 May 2017 in Kigali, Rwanda. Commitments were made by developing countries to restore 150 million hectares of degraded forest and landscape at the United Nations Climate Change Conference held in Bonn, Germany in November 2017. Uganda pledged to restore 2.5 million hectares.

The Forum was organized by FAO, together with Rwanda's Ministry of Natural Resources, the Rwanda Development Board (RDB), the National Agricultural Export Development Board (NAEB), and Rwanda's Green Fund (FONERWA). It provided a platform for showcasing business and market opportunities and promoting a spectrum of investments in forests and landscapes sectors. Discussions were held on: climate change mitigation and adaptation, forest, landscape restoration and land degradation neutrality, business opportunities and challenges in forestry, mitigating risks for private sector investments, and environmental, social and governance standards and monitoring for investments in forests and landscape restoration.

The delegation from Uganda comprised: Leonidas Hitimana-FAO/SPGSIII International Project Coordinator, Levand Turyomurugyendo- FAO, Stephen Mugabi- Commissioner for Environment Support Services at the Ministry of Water and Environment (MWE), Charles Byaruhanga- Principle Forest Officer, Forest Sector Support Department at MWE, Isaac Kapalaga - Manager, Busoga Forest Company, Denis Kavuma - General Manager, Uganda Timber Growers Association (UTGA), Adolf Bagonza, Charles Batte, and John Mary Kitembo.

Other participants included: representatives from forest and landscape companies in Democratic Republic of Congo, Ethiopia, Kenya, Madagascar, Rwanda, Tanzania, and Zambia. Also in attendance were officials from national and international cooperatives and agribusinesses; commercial and development banks; investment funds; insurance companies; and firms which offer technical assistance to investments in sustainable land use business models.

By the end of the meeting, participants resolved to help forest and landscape actors to exceed traditional sources of investment/finance through national and regional advocacy; mainstream forest and landscape restoration into investment flows such as development banks, and public financing schemes and to support good quality, bankable landscape development projects.

The Uganda delegation visited the Fund for Environment and Natural Resources for Rwanda (FONERWA) on 18 May 2017, to share knowledge and experiences in establishment and operationalization of the Environment and Climate Change Fund. Uganda is in the process of establishing its own National Tree Fund.

The team learnt that a multi-pronged approach to resource mobilization is critical for transparent and accountable mechanisms as well as building trust and confidence for stakeholders to effectively support fund capitalization. It was also noted that full autonomy of the Fund is critical for good governance and effective management of a natural resources fund.

*By Charles Byaruhanga- Principle Forest Officer, Forestry Sector Support Department, Ministry Of Water And Environment*

# Promoting quality forest plantations through woodlot and community support



**Edith Nakayiza (in reflector jacket), Programme Assistant at FAO demonstrating to a group in Kumi District how to do lining out using a cross head**



**Edith Nakayiza, Programme Assistant at FAO demonstrating to groups in Jinja District the proper way to dig a pit before planting**

Through SPGS III, FAO is supporting target communities that rely heavily on woodfuel, such as: schools, hospitals, churches, mosques, prisons and community based organizations, small landholders, and rural community groups of at least 20 people, to access good quality tree planting material and establish forest plantations through the project's Woodlot and Community Support activities.

Through this initiative, the Project offers seedlings and on-site technical advice, practical in-field training, and exchange visits for knowledge and experience sharing, and capacity building through training for community groups, community leaders, and staff in charge of tree planting projects at selected institutions. Woodlot and community support activities will be implemented with support from various stakeholders such as community groups and institutions.

The Project's target is to provide up to 4.5million seedlings to cover an area of 4 000 hectares (ha). By June 2017, over 269 community groups countrywide, with a combined area of 15 645ha (approximately 16million seedlings), had applied for this support. After a second-level evaluation, only 247 community groups with a total land area of 10 974ha (approximately 11million seedlings) met the set criteria and were shortlisted.

However, applications from shortlisted candidates will be further evaluated in order to match the land area of the applicants with the project's target land area to be supported.

In June 2017, shortlisted applicants received training in basic plantation establishment to equip them with relevant skills, ahead of receipt of seedlings. Tree species to be supplied include: eucalyptus, pine, "musizi", *Grevillea robusta*, *Tectona Grandis* (teak), *melia volkensis*, terminalia and *gmelina arborea*. has already commenced, SPGS distribution of seedlings to successful communities by October 2017.

Through the institutional/woodlot support, FAO/SPGS III will support planting of 2 500 hectares of plantations for woodfuel. Beneficiaries will also be supported with planting material and technical advice through training. They will be expected to maintain the trees to good quality standard. So far, 46 institutions with a total area of 452ha have been identified for support. More Institutions will be brought on board in due course. Institutions that meet the requirements are encouraged to apply.

**By Edith Nakayiza- Programme Assistant**

# Integrating Beekeeping in Plantation Forestry



*An apiary in a forest*

**B**eekeeping is an income generating activity that tree farmers could engage in for additional income. Bee keepers are compelled to conserve trees because crops and trees provide forage or food for bees through pollen and nectar. However, most crop farmers have limited awareness on the importance of bees in increasing crop productivity and farm income in the shortest period.

- Bees should be introduced in fifth year of the plantation, when trees have flowered and bees cannot be easily affected by forest operations such as spraying, slashing, pruning, and first thinning. However, this may vary for different agro-ecological zones and tree species planted.
- Bee hives should not be scattered throughout the forest since this would affect forestry operations such as weeding, pruning, thinning, and road maintenance. Instead, identify a corner at the fringes of the forest, about one quarter or a half an acre, to establish the apiary, gazette, and clearly mark it. If possible, construct a bee house.
- Hives should be placed at least one meter above the ground to allow apiary inspection and management practices. Hives should not be placed on tree branches because as the trees grow, the branches expand and compress the hives. This makes hive inspection and harvesting of honey and other bee products difficult.
- Apiaries should be placed out of reach of people and away from widely-used plantation access roads because bees do not like noise and distractions.
- Before spraying, determine the wind direction to ensure that the wind does not cause drift of the spray fumes and affect the bees, or even kill them. Bees are very active in foraging between 6:30am and 4:00pm, so spraying near the apiary should be done outside this time frame.
- There are two honey harvesting seasons in Uganda.
- Average honey production per hive colony per season, local (8Kg) and top bar (15Kg).
- On average, every 10 kg of comb honey yields one kilogramme of beeswax.
- A 10-strong hive colony can produce one gram of venom every two weeks.

## Requirements for setting up an apiary

### Assets

- 50 local hives
- 50 top bar hives
- Airtight buckets
- Barbed wires
- Pairs of gloves
- Bee brushes
- Bee smokers
- Cooler boxes/vacuum flasks
- Digital weighing scales
- Venom collectors
- Forage trees e.g. eucalyptus
- Hive tools
- Nails
- Pairs of gumboots
- Poles
- Rechargeable torch
- Refractometers
- Set of protective gear

## Beehive Products

*Below are several products and services one can realize from beekeeping enterprise:*

- **Honey:** A natural sweetener with medicinal and industrial uses in foods and beverages. Honey has no expiration date. It originates from nectar so without bees, the nectar produced by plantation forest is put to waste.
- **Pollen:** Pollen is very nutritious and can be used to supplement diets and reduce malnutrition. Bee brood feed on pollen.
- **Propolis:** Bees collect plant resins and turn them into propolis or bee glue. Propolis is produced by mixing saliva and beeswax with exudate gathered from tree buds, sap flows, or other botanical sources. It has many antibacterial and antifungal properties, with healing properties for colds, flu, and fresh cuts.
- **Royal Jelly:** Bees feed the queen on royal jelly to increase its life span from 42 days to two years or more. In humans, royal jelly has antiaging properties.
- **Bee venom:** When bees sting, they release a water-like substance called bee venom, which is useful in boosting immunity, especially among people with chronic diseases such as HIV/AIDS.
- **Beeswax:** Has highly industrial, pharmaceutical, and cosmetic uses.
- Bees also provide pollination for crops.

A honey market study by TUNADO in 2015 revealed that 15% of honey on Ugandan supermarket shelves is imported. Processed honey in Uganda is supplied to supermarkets, open markets, and hotels. Honey produced in Kigezi region is majorly used by local brewers to make local brew (enturire) There is also informal trade in honey with countries such as Kenya buying honey from West-Nile, Karamoja, and Eastern Uganda; while honey from South-Western Uganda is sold to Rwanda. Globally, demand for beeswax from Uganda is high since it is residue free beeswax. Apparently, the demand for honey and other bee products outweighs supply.

### Prices

Products	Farm gate price in UGX, 2017
Liquid honey (per kg)	8 000
Comb honey (per kg)	6 000
Bee venom (per gram)	40 000
Propolis (per kg)	15 000
Bee wax blocks	20 000

**Source: *Developing and Commercializing Bee Products Business Plan 2017, National Agricultural Research Organization (NARO):***

**By Dickson Biryomumaisho- *The Uganda National Apiculture Development Organisation (TUNADO)***

# Forest Fires: Safety Tips and Prevention Measures

**F**orest fires are increasingly becoming a major threat to tree growers in Uganda to the extent that areas previously not known to report any occurrences, have started reporting episodes of destruction caused by wild fires. This trend has been exacerbated by effects of climate change such as prolonged dry spells over the last few years. Trees whether young or old are susceptible to fire although the younger the trees, the more susceptible. This therefore means that it is critical to put in place fire control measures from the time a tree is planted up until the harvest day.

For fire to occur, three things must be present at the same time: enough oxygen to sustain combustion, enough heat to raise the material to its ignition temperature, and combustible material. It is easier to stop the fire from than

to control and fight it once it has started. Consequently, there are three core elements which tree growers should consider in order to reduce the occurrence of forest fires: the risks, hazards, and exposures. Risks are people/ things or human-related activities that spark off the fire. Hazards are flammable materials such as weeds or fuel loads in the compartment in which the fire starts, while exposures are the property or the plantation that would be threatened by the fire. Preventive measures such as cutting the surrounding vegetation before and during the dry season, creating fire breaks, and continuously monitoring the plantation, can help to reduce the risks.

Additionally, to prevent forest fires, tree growers must design, develop, and implement a comprehensive fire prevention strategy or checklist as presented below.

## Box 1: Forest Manager's Fire Preparedness Checklist

Have You:

1. Sensitized the neighboring communities on the causes, dangers and emergency contacts in case of a fire?
2. Maintained an up-to-date contact list of your immediate neighbors?
3. Maintained fire breaks internal and external weed free and of any debris?
4. Slashed the weeds / the fuel loads (prior to the dry season) in the compartments?
5. Established the fire hotspots i.e. areas with known history of fire occurrences around your plantation?
6. Established fire lookouts/ towers in strategic vantage points e.g. hill tops?
7. Carried out controlled burning in open grass land areas for the purpose of preventing or stopping uncontrolled fires?
8. Conducted a fire fighting tools and equipment inventory?
9. Trained your firefighting team in safe and skillful application of fire management strategies?

*By Blessing Mutambukye- Senior Forester, Global Woods AG*



# UTGA Nursery Provides Greater Access To Affordable Quality Planting Material



**A UTGA nursery worker watering pine seedlings**

Uganda Timber Growers' Association (UTGA) has assumed a leading role in supporting its members and other timber growers to access affordable, quality planting materials through operations of its certified model tree nursery. The nursery, established in 2016 with support from the Norwegian government, is located in Kiwawu, 33km along the Kampala - Mityana Road. Since it commenced production in the first planting season of 2017, the nursery, expected to produce 2.5 million seedlings annually, has so far registered impressive results.

In addition, UTGA provides training in best nursery and silvicultural practices and demonstration space for students, foresters and nursery operators, as well as supporting all forms of nursery research in commercial forestry. Plans are underway to establish a mini arboretum for demonstration purposes.

The tree species produced at the nursery are: *pinus caribaea* (PCH-Brazil) and *Eucalyptus grandis* (South Africa), but efforts are ongoing to start large scale production of eucalyptus clones. A mother garden

has been raised and the first clones will be ready for sale during the first planting season of 2018. An array of eucalyptus clones will be produced, including: GU 7&8, GC796 1&2, and GC 550. The nursery also produces fruit seedlings and selected indigenous tree species.

UTGA has also imported PCH (F2) seed from Brazil. UTGA members and other timber growers are advised to immediately make their orders for seedlings. UTGA members can buy Pine seeds at UGX 3.2million and UGX 3.5million for non-members. Nursery operators are advised to always order for their seed before the production season. Established as one of the ways of sustaining the operations of the Association, the nursery is a critical function of UTGA.

UTGA is a members' organization that brings together tree growers in an effort to ensure sustainable, profitable, socially economical and environmentally sound forest industry in Uganda.

**By Dennis Kavuma, Uganda Timber Growers Association**

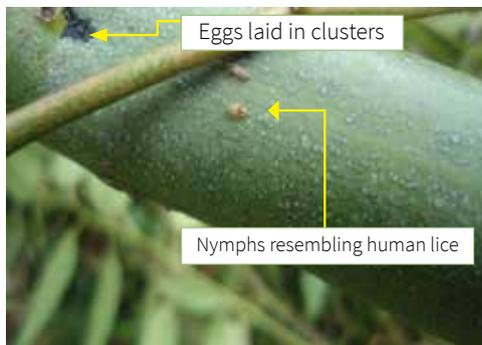
# What Every Tree Grower Should Know About the Destructive Eucalyptus Lice Pest

In November 2014, *Thaumastocoris peregrinus* Carpintero & Dellapé (Hemiptera: Thaumastocoridae) or *T. peregrinus*, commonly known as Bronze Bug, was observed in Budwale sub-county in Mbale district, Eastern Uganda. This was the first time the pest, a

member of the Thaumastocoridae family, was reported in Uganda, although it was earlier reported to be infesting Eucalyptus trees in Kenya. The pest has since been observed in Kabale, Rukungiri, and Bushenyi districts where it is causing severe damage to eucalyptus trees.



An adult *T.peregrinus*



*T. peregrinus* lays black sculptured eggs on leaves or branches, either singly or in groups. Nymphs, except for size, resemble human lice



Adults and nymphs may be found in large numbers on leaves

*T. peregrinus* is a sap-sucking insect pest which feeds on the leaves of a variety of eucalyptus species, causing serious damage. The bug is light brown in colour with some darker areas, has a strong dorso-ventrally compressed and elongated body, measuring about 3mm, a broad head, and elongated conspicuous mandibular plates. The Eggs are black and laid in clusters on leaves and twigs. When in the nymph and adult stages, *T. peregrinus*, is very agile and moves quickly on the leaves. The crawlers and young nymphs are essentially orange, with black spots on the thorax and first abdominal segments.

The pest easily attaches itself to materials, including, clothing; making its mobility easy through human movement. Other possible pathways include: cut branches and wood (as carried by hitchhikers) from countries where *T. peregrinus* occurs. Native to Australia, *T. peregrinus*, has been reported in: Argentina, Brazil, Chile, Malawi, Zimbabwe, South

Africa, and Kenya. However, it is not certain how the pest was easily introduced into new habitats; even though it has shown a high potential for spread between continents. In Brazil, *T. peregrinus* could have spread from neighbouring Argentina and Uruguay through international trade.

## Why Uganda should be on alert

In Uganda, eucalyptus trees are popularly planted for wood, timber, charcoal, and biomass fuel. According to the National Forestry Authority (NFA), it is estimated that there are over 14786 hectares of eucalypts in Uganda, equivalent to about 518 Billion Uganda Shillings or \$148 million. *T. peregrinus* feeds on leaves of the host tree, causing leaf discoloration (bronzing, reddening, and yellowing) as seen in the figure below as well as early senescence and stunted growth. In severe infestations, the foliage will wither and drop off, causing branch dieback and mortality.



**Leaf bronzing, a form of leaf discoloration**

Damage by *T. peregrinus* on eucalyptus trees in Uganda will negate national incomes and exacerbate the already declining shortage in wood products in the country. The European and Mediterranean Plant Protection Organization (EPPO) has added *T. peregrinus* to its Alert List of pests due to its high destructive nature on eucalyptus.

### **Managing *T. peregrinus***

Reports from Australia indicate that in Sydney, micro-injections of imidacloprid (an insecticide that mimics nicotine, is toxic to insects, and is used to control sucking insects) at a rate of 3 to 5ml /10 cm, significantly reduced *T. peregrinus* populations for two to three years. However, the use of chemicals is not practical, economical, or sustainable and overuse could contribute to a growing pollution burden, and lead to pest resurgences. As a long-term management option, biological control using an egg parasitoid wasp called *Cleruchoidesnoackae* is recommended for management of the pest. The parasitoid has so far been released in South Africa and preliminary results show high impact against the pest. Based on this documented evidence of success, the National Forestry Resources Research Institute (NaFORRI) and partners, including FAO, plan to introduce this biological control agent for management of the pest. NaFORRI believes that biological control of *T. peregrinus* will give tree growers more confidence in planting eucalyptus.

**By Peter Kiwuso, Senior Research officer National Forestry Resources Research Institute (NaFORRI)**

## **Better Globe Forestry Company to Start Commercial Forestry in Uganda**

**B**etter Globe Forestry Ltd (BGF), the holding company in the Better Globe Group of companies, will start commercial tree planting in Uganda in 2018, as part of its efforts to make Africa a greener, healthier, and wealthier place in which to live, by focusing on development of profitable, commercial tree plantations for environmental and humanitarian benefits. So far, BGF has identified relatively dry areas in Uganda, particularly Moroto, Napak, Abim and Nakapiripiriti districts of Karamoja as well as Dokolo, Kaberamaido and Aleptong districts in the Lang region, as prospective areas for community tree planting.

Incorporated in Kenya in 2004 and in Uganda in 2009, BGF has a vision of eradicating poverty in Africa by promoting massive tree planting and sustainable agricultural in semi-arid and arid areas. This will be achieved by

planting trees through Social Entrepreneurship which is hoped to finance a sustainable implementation of the vision. The company is partnering with farmers through an out-growers programme and a microfinance scheme.

In Kenya, BGF has established plantations of *Melia volkensii* (mukau) in the Kenyan drylands. Mukau provides high-quality timber, its fruit and leaves are used as fodder while the flowers are a source of honey. The wood is easily worked and shaped. Additionally, leaf preparations are used as flea, mosquito and fly repellents. The tree is also useful in agroforestry since its deep rooting nature makes little interference with ox-plough cultivation.

**By Diana Ahebwe, Country Representative, Miti Magazine, Uganda**

# FAO to Support Forestry Research Through COMFORT Working Group



**T**he Commercial Forestry Research and Training (COMFORT) Working Group has identified a number of areas for research and training to advance the forestry sector in Uganda. At its quarterly meeting held on 28 June 2017, the Group identified priority areas including: tree nursery development, pest and disease management and control, timber processing skills and technologies, and fire management. Consequently, the SPGS III Project will support research on disease and pest management through a baseline study on the infestation of two problematic eucalyptus tree pests: Red gum Lerp psyllid (*Glycaspis brimblecombie*) and Bronze Bug (*Thaumastocoris peregrinus*). The study will determine the extent of infestation in Uganda and will be conducted with technical support from Makerere University and National Forestry Resources Research Institute (NaFORRI). According to Uganda Tree Growers' Association (UTGA), a member of the COMFORT Group, the pests are a big problem to tree growers thus UTGA will provide the team with information on the levels of infestation, location and trends.

COMFORT is a platform for discussion, exchange of ideas on research and training, and forum to tap into regional

experiences and skills in forestry. Formed in 2008, COMFORT composed of major stakeholders in forestry, with interest in research and training. They include: FAO, National Forestry Authority (NFA), National Tree Seed Centre (NTSC), Forestry Sector Support Department (FSSD) of the Ministry of Water and Environment NAFORRI, Nyabeyya Forestry College, School of Forestry, Environmental and Geographical Sciences (SFECS) at Makerere University, and Uganda Timber Growers' Association (UTGA). COMFORT Working Group members meet to share plans, agree on joint actions, and discuss findings on a range of priority issues in forestry.

FAO is optimistic that the commitment and passion for better forestry, as exhibited by members of COMFORT, will greatly promote a more vibrant forestry industry and enhance the sector's contribution to national aspirations and international goals. Notably, more than 52000 hectares of Pine, Eucalyptus, and Teak tree species combined, have been grown in Uganda in the last decade. The interventions of the COMFORT Group are therefore relevant in order to sustain and increase forest cover in Uganda.

**Table2: Priority areas for research and training as identified by the COMFORT Working Group**

1	Growth Models
2	Tree nursery development
3	Species and provenances trials
4	Pest and disease management and control
5	Silvicultural trials
6	Timber processing skills and technologies
7	Development of seed stands and orchards
8	Policy and trade
9	Value chain for forest products
10	Performance and strength properties of different woods
11	Fire management

The prioritisation of research needs is vital to inform stakeholders of the critical areas where resources should be allocated. Members

agreed to work together through collaboration and fundraising drives to raise funds for research in the key identified priority area. It was noted that some tree farmers, particularly the large companies already have some ongoing research that could be leveraged upon.

Despite the research gaps identified, there are research findings, yet disseminated to users for consumptions. COMFORT will among other roles be responsible for sharing and dissemination research findings to stakeholders.

**By Andrew Akasiibayo- Programme Assistant, FAO/SPGSIII**

## Uganda Forestry Association Professionalizing Forestry Sector

Uganda Forestry Association (UFA) was established in 1985 as a professional, national Non-Governmental Organization (NGO) to ensure a sustainable forestry sector that is accorded its rightful role in contributing to socio-economic development and environmental protection through production of indispensable goods and services. The Association's activities include: training communities at the grassroots, in forestry best practices, awareness creation and sensitization on benefits of forests, as well as dissemination of information. Currently, UFA is developing a code of conduct to regulate the practice of professional forestry in the public interest, an aspect of the UFA Bill (2010) before Parliament.

Membership is open to students, foresters, individuals working in and/or interested in forestry, affiliates, and corporate members i.e. the National Forestry Authority (NFA) and the National Forestry Resources Research Institute (NaFORRI) for promoting forest governance and professionalism. UFA has 220 registered members and requires 50 000 Uganda Shillings as membership fees and 20 000 Uganda Shillings as annual subscription.

UFA's key strength is its pool of diverse expertise, readily available for advisory services on diverse issues of forestry for a reasonable fee. Members enhance each other's knowledge and experience through periodic information sharing, advocacy and policy dialogue.

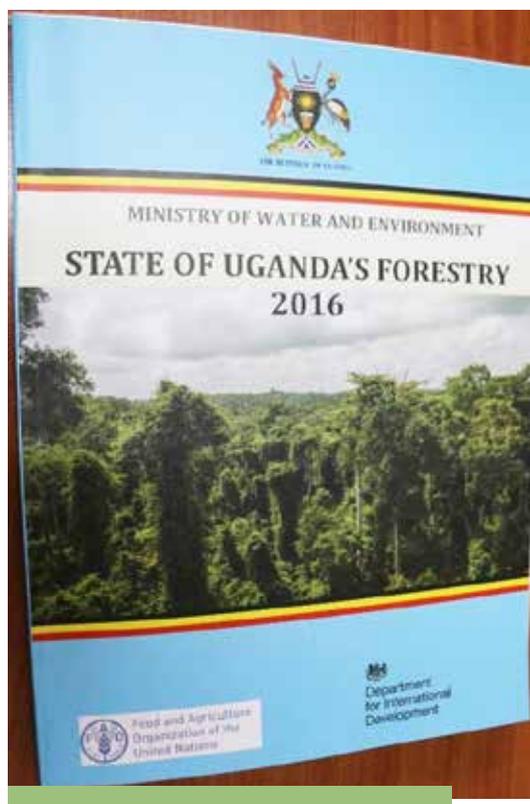
UFA works closely with the Forest Sector Support Department of the Ministry of Water and Environment, and collaborates with the district forest services, Climate Change Department, Forestry of Makerere University, Uganda Timber Growers Association, and Uganda Forest Working Group.

In 2016, UFA and FAO produced a publication titled: Forest Contribution to the Economy and Trade in Ethiopia, Kenya and Uganda, where attempts were made to illustrate the multiple benefits derived from forests and the potential contribution of forests to national economies and incomes. It can be accessed here: <http://www.fao.org/3/a-i5517e.pdf>. Other forestry publications by UFA members include: Forestry in Uganda, Over a Century and its future by Sizomu Kagolo, Meeting, Planning, and Management by Goretta Katusabe Ssemwezi and The Uganda Timber Users Handbook by Mssrs Plumtree and Paddy Kityo.

With support from the African Forest Forum, UFA is participating in the formation of a Regional Eastern African Forestry Association. The Association is committed to advancing efforts to professionalize forestry in Uganda and greatly acknowledges FAO's support in its activities.

**By David Walugembe- Secretary General, Uganda Forestry Association**

# BOOK REVIEW: State Of Uganda's Forestry 2016



**T**he State of Uganda's Forestry, 2016 is a compendium of all matters of forestry in Uganda; from the history of the sector, evolution of the policy and institutional frameworks to forestry financing, as well as consumption and trade in forestry products and services. The report provides a status of the forestry sector in Uganda, revealing useful statistics and trends.

The report gives a background to the sector, chronicles the evolution of forestry in Uganda from as far back as 1905 when the Forest Department (FD) was first established by the colonial government to manage Uganda's forests. It also examines the policy and legal framework for managing the forestry sector in Uganda from 1929 to-date. Since 1929, the forestry policy has undergone a series of changes especially

in enforcing conservation and more liberal economic use of forest resources.

According to the report, Uganda's current Forestry Policy of 2001, provides guidance for sustainable development of the sector, through legal frameworks and key international obligations on forestry, while incorporating advances in principles and standards for sustainable forest management. The report further examines the institutional frameworks for managing forestry in Uganda and outlines the relevant institutions charged with managing forestry resources and spells out their mandates and functions as derived from the 1995 Constitution and other enabling legislation, such as the Local Government Act of 1997.

Readers can also get insights on challenges affecting the forestry sector, such as: encroachment in central forest reserves, rapid deforestation and degradation, forest fires, population growth challenges, and governance issues. Some of these challenges have shaped the trends in the forestry sector as demonstrated by the past and current status of the forest estate.

Although it is known that forestry contributes to national and individuals' incomes, the report notes that the contribution of forestry to the national economy is grossly underestimated since most of this contribution is in form of provision of ecosystem services such as protection of catchments and biodiversity conservation which are hard to quantify in monetary terms. As such, the contribution of forestry to Uganda's economy could be higher than the current estimates if the non-monetary contributions from woody biomass as the main energy source and provision of ecosystem services were considered in estimating contribution to the national GDP.

Finally, this landmark document highlights key forest restoration interventions being undertaken by the Government of Uganda and other stakeholders as well as mechanisms for funding forestry interventions in the country. The report warns that although efforts are on-going to promote tree planting and plantation development on private land and in forest reserves, the current loss of forest cover and rate of forest degradation present a grim and uncertain future for the sector, requiring affirmative actions.

For more information on The State of Uganda's Forestry 2016 report, please contact the Ministry of Water and Environment.

*Reviewed by Henry Ahimbisibwe- Programme Assistant/ Plantation Development, FAO/SPGS III*

# Timber Market Report, Quarter One 2017

Table 1: Current retail prices for selected timber species and sizes

SPECIES	SIZE	AVERAGE PRICE
	(inch x inch x foot )	(UGX)
Eucalyptus	Poles 4-6 inches	3,000
Eucalyptus	4X3X14	18,000
Pine	12X1X14	50,000
	6X2X14	18,000
	4X2X14	12,000
Mahogany	12X2X14	115,000
	8x2x14	85,000
Mahogany (Congo)	12X1X14	95,000
Mahogany (Uganda)	12X1X14	75,000
Mvule	12X2X18	165,000
	12X2X14	115,000
	8x2x14	95,000
	12X2X18	160,000
Nkalati	12x2x14	85,000
	12x1x14	65,000
Kirundu	12X1X14	7,000

Kampala retail prices, Q1, 2017 (Source: FAO/SPGS III)



Table 1 above shows the average timber prices as reported by timber dealers around Kampala in the first quarter of 2017. Generally, the prices for locally sourced and imported boards (hardwoods) remained constant. Figures 1-3 show the price trends of major tree species traded in Uganda in the recent years, based on dealers' retail prices in Kampala. Generally, the timber prices for both locally sourced and imported boards remained constant since quarter one.

The prices for machine-sawn pine timber remained constant; due to intense competition from readily available, sub-standard hand-sawn timber, measuring 14 feet in length. This timber is mostly sourced from thinned forests plantations. However, worth noting that most of the forests planted between 2004 and 2009 (SPGS- Phase I) were undergoing second thinning and the timber was being channeled to the right market.

It was noted that, most of the timber users/buyers were not able to differentiate timber based on quality, but on prices. Only contracted companies with specific procurement guidelines provided by their clients, e.g. ROKO Construction, insisted on quality, standard length, and sawing. Most of the traders were dealing in small-dimension, hand-sawn timber.

A constant price of *eucalyptus* species was observed and attributed to the availability of small dimension, cheaper, hand sawn pine timber that was being used as a substitute.

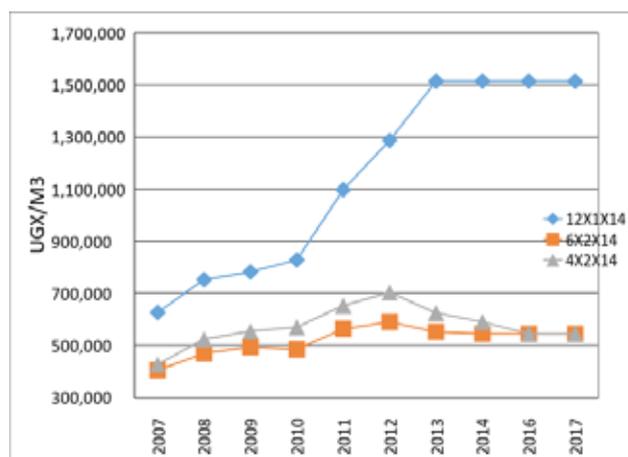
Like pine, most of the eucalyptus purchased was used for purposes of construction and not in the furniture industry.

With the surge of immature pine timber in the market, the prices of timber from eucalyptus species were expected to decline.

The prices of most of the remained constant. Unlike in the previous quarter, the supply of Mahogany (Khaya spp.) was stable. This was attributed to the reduction in demand of timber from Congo, by Kenyan traders, fearing political uncertainties as Kenya went through its election period.

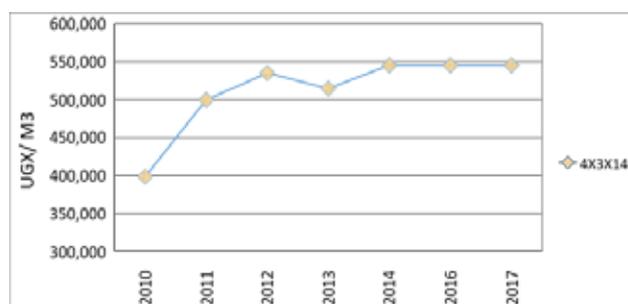
It's imperative to note that part of the mahogany on the Uganda market was being imported from Southern Sudan leading to an increase in supply, constant prices, and reduction in demand of alternative species such as Mvule (*Milicia excelsa*) ultimately affecting their pricing.

**Figure 1: Price trend for Pine trees**



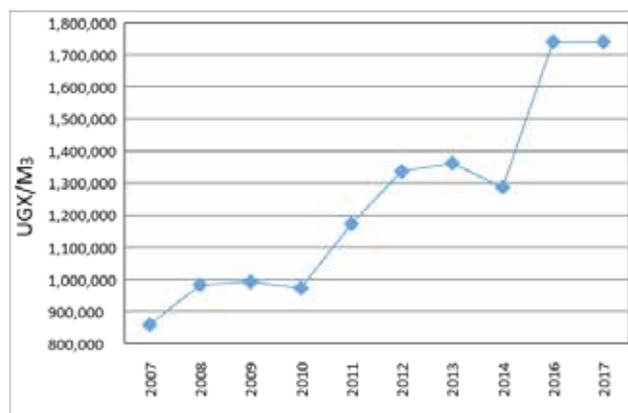
(Source: FAO/SPGS III)

**Figure 2: Price trend for Eucalyptus trees**



(Source: FAO/SPGS III)

**Figure 3: Price trend for Mahogany trees**



(Source: FAO/SPGS III)

## Eucalyptus Poles Market

Table 2: Current retail prices for treated and untreated Eucalyptus poles of different sizes

Size (Meters)	Price-Seasoned (UGX)	Price-Treated (\$)
10	165,000	160
11	200,000	185
12	255,000	214
14	292,500	284

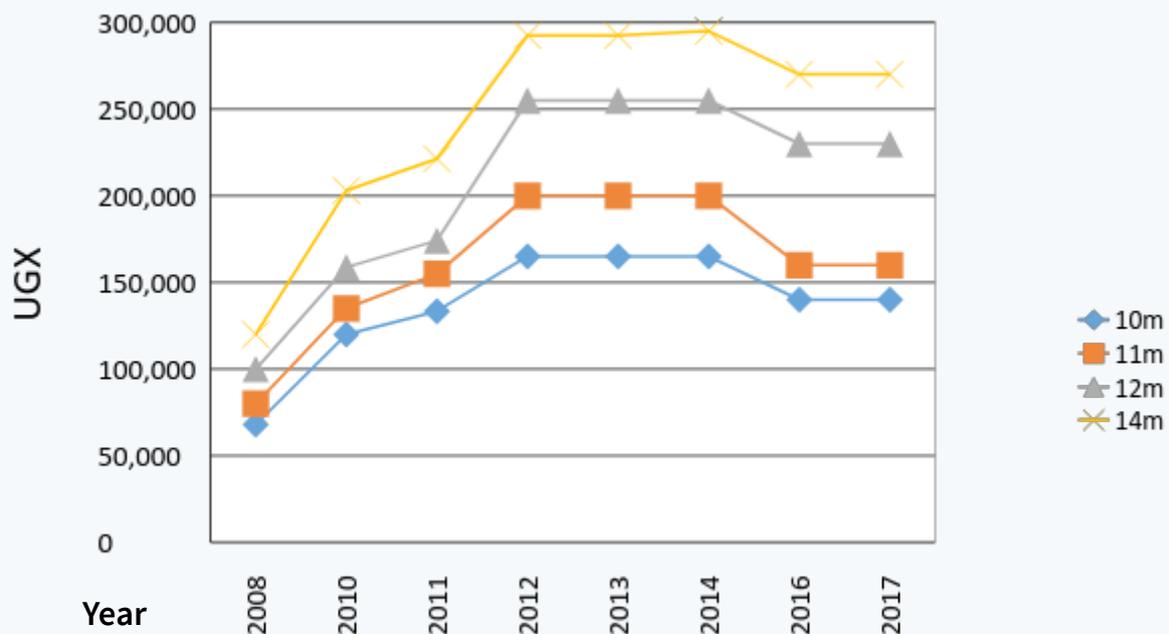
(Source: FAO/SPGS III)

\*\$ = UGX 3,570 @ 06/06/2017

Table 2 shows the current prices for seasoned poles and the selling prices for treated poles as reported by operators of different pole treatment plants.

Figure 4 shows the price trends of eucalyptus poles in Uganda over the past few years as reported by operators of different pole treatment plants. The prices of seasoned poles remained constant as they were mostly determined by Uganda Electricity Distributuin Company Limited (UEDCL) which normally tenders out the supply of poles over a specified period. Most of the pole treatment plants reported a decline in supply of poles, anticipating a rise in the prices.

Figure 4: Price trend for Eucalyptus poles



(Source: FAO/SPGS III)

By Peter Bahizi- Programme Associate, FAO/SPGS III

# Forestry Quick Facts



**F**orest cover in Uganda shrank from 24 percent (4.9 million hectares) in 1990 to 9 percent (1.8 million hectares) in 2015; implying that 3.05 million hectares were lost in a period of 25 years.

*The State of Uganda's Forestry 2016, Ministry of Water and Environment*

**F**orests are part of the global 2030 Agenda through Sustainable Development Goal 15: Life on Land. It seeks to: Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss.

<https://sustainabledevelopment.un.org/topics/sustainabledevelopmentgoals>

**M**ore than 25 percent of the medicines used in the world originate from rainforest plants. Yet only 1 percent of rainforest plants have been studied for medicinal properties. Every second, an area of rainforest the size of a football pitch is cut down, meaning that every day, we might lose a potential cure.

<https://www.greenpeace.org.uk/9-awesome-facts-about-forests-20140321/>

**30** million jobs are created by forest based activities in developing countries. The Sub-Saharan Africa charcoal sector alone employs an estimated 7 million people. Almost 900 million people, mostly in developing countries, are engaged in the wood-energy sector; while others generate income from: lumbering and processing of raw material among other activities. In the modern world, the growing global population is increasing the demands for forest products, putting forests at high risk of deforestation and degradation.

*African Sisters Education Collaborative <http://www.asec-sldi.org/news/current/interesting-facts-forests-trees-africa/>*

**F**orests supply over 90 percent of Uganda's energy requirements in the form of fuel wood and this is expected to be the major source of energy in the foreseeable future. In 2008, the total annual consumption of firewood was about 20 million tonnes of woody biomass. Wood accounts for 27 percent of the total primary energy supply in Africa and 45 percent of the world's renewable energy supply.

*The State of Uganda's Forestry 2016, Ministry of Water and Environment and <http://www.asec-sldi.org/news/current/interesting-facts-forests-trees-africa/>*



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