



THE TREE

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"The tree" n'orupapura rw'amakuru orurikuhandikwa aba TIST uganda itsagi rya The International Small Group and Tree Planting Program.

OKUKORA KWAITU

TIST n'ekigombe ekyehaireyo kwimutsya omutindo gw'abahingi aba hansi kirikubonyeramu amaani gokurwanisa okucwekerezibwa kw'ebibira, okwenjuna obworo nekyanda kitari kyabuziija.

EBIGYENDERERWA BYAITU

Omukunywanisa entunguuka yentuura n'okurundana orwoya orurungi orurikuru ga omumiti. Nokunyunyuta orwoya orube kuruga omu mwanya TIST nehweza abahingi abarikurenga 25,000, eby'okwerinda sirimu, endiisa enungi yab'omumaka nokucendeza enkoresa y'enku n'amakara.

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EBIRY'OMUNDA

Eihunire rya kwikumi nakumwe
Hatariho mpinduka, thariho ntunguuka.
Okuhinga emiti y'enzaarwa nikireeta amaani omukurinda obuhangwa.
Kora TIST ebeempanguzi: Omumikorere yaayo n'okubara emiti.
Gyezaho kuhinga amapaapari omurutookye.

NOVEMBER 2012 NEWSLETTER

EDITOR'S MESSAGE.

TIST FARMERS.

From the middle of this year, some of the TIST Program activities including tree payments were put on hold on temporary basis.

Major activity is to get as many SGs/groves to PDD, SGs/groves which attain good standards with all data available and accurate will be validated and be eligible for carbon sale on the world market.

TIST Quantifiers and staff are visiting your groves to assess the standard and collect more data. At the end of this exercise, validators will be invited to do their job.

Make sure your GSG/grove is validated. Keep listening to Radio talk show.

Ara.

OBUTUMWA BWA EDITA.

Abahingi bemiti omu Uganda,

Kurigirira ahagati yogu mwaka, emirimo etari emwe oteiremu nokushashura abahingi sente zaabo, ckeemerezi bwaho ahabwa akaanya.

Omurimo omukuru nokureeba ngu ebibira/amahamba maingi gashwijumwa kugabaasisa kuza omukuhayana gakaikirizibwa kuguza omwoya obwo gari aharurengo rwensi yoona ahabwo mwoya kuguzibwa.

Ababazi bemiti nabandi bakozi ba TIST bari omukutaayaayira amahamba ganyu nokwakiira agandi makuru. Ekyo kukirahwe abashwijumi nibaija kwetwa batandikye ogwabo. Reebe ngu ihamba/ekibira kyawe tikiyanagwa nyima yebindi. Guma ohuriirize ebya TIST aha Radio.

Ara.

NO Change, NO Growth

The world is fast evolving. We need to adapt to the changing environment, changing technologies, and new ways of doing things. If we refuse these changes, we risk being left behind!

For instance, new energy saving cook stoves have come to replace the traditional three stone stoves. People who have adopted new stoves are saving a lot of trees, and saving money and time spent on fuel wood. They are keeping smoke away from the kitchen by using chimneys on their stoves, and so are keeping the families healthier and keeping diseases away.

For farmers who have tried it, Conservation Farming is fast replacing the traditional tilling farming practices. With Conservation Farming, many farmers are getting better yields and also saving money and time by using less fertilizer and chemicals and saving on ploughing costs.

Farmers also benefit from planting high value fruits, like grafted mangos, oranges, avocados, and other fruit trees, in place of other varieties in our gardens. Often, these grafted varieties have higher yields so we can get income from the sale of fruit and improve our own nutrition. TIST Uganda farmers are learning the benefit of planting diverse trees instead of plantations with one or few species. These diverse trees are more resilient and resistant to disease and pests and provide diverse products for use and sale—a valuable benefit! Today, farmers who have adopted the technology of grafting are getting more money, their mangoes yielding fruit at an early age. Similarly, farmers find that planting a single crop on their farms is risky. Farmers are

diversifying what they plant—planting beans, cassava, sorghum, and more—so that they harvest crops even if weather or disease damages one crop.

TIST farmers have embraced these changes and are helping each other learn and develop new best practices and sharing what they learn in meetings and in this newsletter. Join TIST today: share and learn! In TIST, we all can change our lives for the better.

By Sarah Nankunda.

Indigenous trees: strength in biodiversity

Farmers in TIST plant many species of trees, including fruit and nut trees, trees for fodder, trees that improve soil fertility, and species that can be harvested for timber. More and more farmers are choosing to plant indigenous tree species for their many benefits.

What is an indigenous tree?

An indigenous or native tree is one that is well adapted to an area because it has grown and reproduced naturally there over a long period of time. Not all species that are familiar to us are indigenous. Many have been introduced by people from areas far away. There are hundreds of species of trees that are indigenous to Uganda.

Why are indigenous trees important?

Because indigenous trees have evolved with the local environment, animals, plants, and other organisms around them, they are well suited to the area. Often, this means that they can grow well without expensive additional inputs like pesticides or

fertilizers. They often require less maintenance than exotic, introduced species. They diversify our farms, so that risks of pest outbreaks can be lower.

They provide habitat and food for wildlife and diverse benefits for us from their fruits, timber, leaves, and traditional medicine. Introduced or exotic species can provide many benefits, but some can become weedy and crowd out other trees or crops.

When we plant indigenous trees on our farms, we are helping protect species that have been useful to our mothers and fathers, to our grandparents, to people and wildlife. We are still learning about the benefits of the many species around us. When we plant indigenous species, we can help ensure that the trees and their benefits are there for our children.

Which tree species are indigenous?

There are hundreds of indigenous tree species in Uganda. Look around and see what species grow in the forests near you. Ask your neighbors and cluster members what trees they grow, and which trees in forests provide important benefits for them. If we work together, we can protect this great resource of diverse forests for our children and generations to come.

Here are some indigenous tree species that provide important benefits, and we thank the World Agroforestry Centre for this information on benefits and seed collection and preparation for success. Try growing some of these starting this season and share what works best in your area!

***Prunus africana* (Red Stinkwood)**

This indigenous tree is mainly found in forest reserves. Seeds are available in forests during the dry season. Collect only dark brown, ripe fruits from the crown of the tree or the ground.

Remove the pulp by soaking for 24 hours, then wash over a wire mesh. Spread in a thin layer in an airy, shaded place to dry – but for 4 hours only. The seed does not store so use the fresh seed.

Wrapping moist leaves around the seed minimizes moisture loss during temporary transport and storage. Sow directly into the seedbed or pots. Germination takes 6-8 weeks.

Uses:

- **Pest repellent:** Can repel some pests e.g. aphids, nematodes (those which attack crops) by its smell. Flowers have sufficient nectar and pollen for good bee forage. Produces high quality firewood.
- **Medicine:** Liquid extracts from bark are used in the treatment of prostate enlargement. Leaves are used as an inhalant for fever or are drunk as an infusion to improve appetite. Water is added to pounded bark, and the red liquid is used as a remedy for stomachache; bark extract may be used as a purgative for cattle.
- **Erosion control:** Trees can be grown along contour ridges and terraces, provides useful shade and act as a windbreak. Soil improver. Leaves can be used as mulch and green manure.
- **Ornamental:** It makes an attractive garden shade tree.

***Albizia gummifera* (Peacock Flower)**

This tree is found in lowland and upland rainforest and in open areas near forests. Fresh seeds need no

pre-treatment. Stored seeds are soaked in warm water and left to cool. The seed coat may be nicked at the cotyledon end to hasten germination. Seed germination is good, 70-80%, within 10 days. Seeds should be collected while still on the tree to minimize insect damage. Seed can be stored a year if kept dry and insect free through addition of ash.

Uses:

- **Bee-forage, fuel wood, timber, gum, tannin, medicine** (extracts from the crushed pods are taken for stomach pains and the bark decoction for malaria), erosion control (the root system holds soil and prevents gulley erosion),
- **Shade**, nitrogen fixing (improves the soil), known as a good mulch tree as leaf litter is abundant during the leaf shedding season,
- **Ornamental** (planted in town avenues for its beauty),
- **Boundary planting**, the leaves quicken the ripening process in bananas.

***Olea africana* (African Wild Olive)**

This tree is found in a variety of habitats, usually near water, on stream banks, and also in open woodland. It is resistant to both frost and drought. Fresh seeds are used for sowing. Old seeds can be soaked in cold water for 48 hours. Seeds are often pre-treated by cracking with a hand vice or by rolling a stone over seeds to enhance germination. Seeds can be stored at dry room temperature for a few years.

Uses:

- **Food:** the main olive products are olive oil and edible olives. Fodder: The plants are much browsed on by livestock. Also used for fuel, timber,

charcoal, toothbrushes and ornaments.

• **Reclamation:** The high drought tolerance suggests that it is a good candidate for reforestation in semi-arid zones of Africa.

• **Ornamental:** Olive trees have the capacity to beautify the landscape.

***Syzygium guineense*, (Waterberry)**

This tree usually occurs in lowland rain forest and mountain rain forests. It commonly grows in moist conditions, sometimes even in water, and is usually found along streams.

Seeds need no pre-sowing treatment, as germination rates are good and uniform.

Rates of 80-90% are attained after 20 to 50 days.

Direct sowing into pots is recommended. Fruits are perishable, hence should be picked from the ground soon after falling. They may also be collected by shaking the branches with hooks. After collection, the fruits should be sown out immediately as seeds will lose viability if they are dried. If this is not possible, fruit can be stored for a few days in moist sawdust and open containers in well-ventilated rooms.

Uses:

- Bee forage, Timber, Fuel wood, Shade, Medicine

Note: the poisonous bark has been reported to cause human deaths, so advice should be sought from people experienced in using the products for medicine from this tree.

***Melia* (*Melia volkensii*)**

This termite-resistant tree provides good fodder at the end of the dry season when other fodder may be scarce, and so can be valuable for TIST farmers. The trees, open-crowned, with gray bark, may grow to

a height of 6 to 20 meters. Melia is common in in acacia-commiphora bushland with rainfall of 300-800 mm. It sometimes borders seasonal rivers or wetlands or appears on rock outcrops. It sheds its leaves twice a year, and can be a good choice to plant along with crops.

Melia is often started from wildlings or root cuttings, though root cuttings may produce an unstable tree. If grown from seed, the seed should be scarified using fire (fast fires or dry grass dung) or the seed coat nicked and then seeds soaked in water for 6 hours before planting.

Uses:

- Excellent fodder for goats and cattle; timber, beehives.
- Leaf preparations are used as flea and fly repellents and are said to be particularly effective on goat kids.
- Good agro forestry tree.

By Enoch Tumwebaze.

Make TIST a success: TIST values and Quantification

In your local areas, TIST Quantifiers work to collect data on TIST tree groves needed for you to take part in the global carbon market. They collect information on the number of trees planted, the spacing, the circumference, the shape and location of the grove and take pictures of the grove. The information is used to calculate how much tree incentive a group should receive and to prove to people buying carbon credits that the tree groves exist and that our data are accurate and honest.

It is important that we remain honest with our buyers. If we join TIST, sign the Green house Gas contract but fail to abide by the contract, we hurt all TIST farmers. For TIST to be strong,

and so that we can continue to receive incentive for the work we are doing to improve the environment, we must be true to TIST values. In TIST, we are honest, accurate, transparent, mutually accountable, volunteers, and true servants to each other.

Everyone involved with TIST, including Small Group members, Trainers, Quantifiers, and Staff, must abide by these values. For instance, if you fail the promise of keeping the trees for long-term (30 years and above), you break the promise made to customers who buy the carbon offsets.

Customers lose faith, and the business will not succeed. When we don't follow TIST Values, we hurt ourselves, and members of our Small Group, and TIST in Uganda and globally.

To help the Quantifiers do their job accurately, please help have your groves ready as below, answer Quantifiers' questions honestly, and be ready to help them in Quantification:

- v Plant trees in rows where possible
- v Care for your trees to encourage healthy tree growth
- v Space trees correctly according to needs of the different species.
- v Maintain groves so that Quantifiers can walk around the grove and count trees.
- v Do not harvest trees, except to thin for spacing, before the trees are 30 years old.

Grove owners should know how many trees they have in their groves and sign the quantification form indicating the number recorded by the

quantifiers is accurate. This is a requirement in order to be paid. The number should be the accurate tree-by-tree count of trees they have planted in TIST and that they plan to maintain for thirty years. Groups should make sure this is correct because if it is false, the group will not be paid any money and may be disqualified from TIST

By Hakim Bachwa.

Paw paws in my banana plantation: try my best practice!

I never knew that paw paws were good for my banana plantation, but when I planted them, I found that they acted as wind breaks for my bananas. They are the best, friendly crops for my plantation.

The paw paws inter planted with bananas grow well and yield many nutritious fruits that are good for our health. I sold surplus to increase on our household income. Furthermore, these paw paws are medicinal: the fruits are rich in enzymes that aid digestion and so can help with stomach problems. They may also help when we have intestinal parasites.

Pawpaws can be planted along paths, in our compounds, and in our garden. We can sell the fruits, and this has helped me raise school fees for my children.

Paw paws grow fast and look good in our compounds. They do not prevent bananas from growing well when planted in banana plantations. They are good fruit trees.

Fellow TIST members, let us all work together to plant indigenous trees, and fruit trees like paw paws, mangoes, oranges, and jackfruits. We shall get money and fruits from them.

By Kabikire Milton, Trainer