

Mazingira Bora



TIST

The International Small Group & Tree Planting Program
www.tist.org

English Version

An Environmental, Sustainable
Development and Community Forestry
Program.



Antubochio TIST Cluster members during their monthly cluster meeting.

Picture by William Mugambi

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In honour of Professor Wangari Mathai, plant 71 more trees on your farm this season.



We in TIST join the rest of the world in mourning the passing of environmental icon, Professor Wangari Mathai. She founded the Greenbelt Movement in 1977 and became a great advocate for better management of natural resources, for sustainability, equity, and justice. TIST members and organization interacted with Professor Mathai in many forums where we discussed various ways to achieve our shared goal of empowering people to improve our environment and our lives.

It is very sad that Professor Mathai has left us. We will carry on with the good work of protecting and conserving our environment into the future.

This planting season, we are calling upon each and every TIST farmer to plant an additional 71 trees, in honour and remembrance of the 71 years of Professor Mathai's life. For instance, if you had planned to plant 100 trees this season, plant 171. If you intended to plant 1,000, plant 71 more. If all TIST farmers in Kenya heed this call to honor

Professor Mathai in this way, we will have more than 3.5 million new trees, a beautiful forest for a beautiful life.

Remember, Professor Mathai was a champion of indigenous trees. She said, "When I want to celebrate, I always plant a tree. And so I got an indigenous tree, called Nandi flame, it has this beautiful red flower. When it is in flower it is like it is in flame."

Please consider planting as many indigenous trees as possible.

We will publish the names of farmers and number of trees that TIST farmers have planted in honour of Professor. If you would wish to be included in the '**Roll of Honour for Professor Wangari Mathai**', please send a text (SMS) of your name, name of your cluster and number of trees you planted to 0718790007 (SMS only). Please send this on or before 15th November 2011. This will be published in the December 2011 issue of *Mazingira Bora* Newsletter

Growing the TIST Program: Be ready for an audit to qualify your Clusters for self –governance.

Soon, TIST Clusters will be audited to measure their progress towards becoming strong clusters capable of self-governance. Self –governed Clusters are an ultimate goal in TIST, and help keep costs low so that benefits to farmers can be big. Clusters that will pass the audit will receive many benefits, and ultimately, will self-govern. The audit will focus mainly on determining if the cluster is strong enough to serve its own members. A strong cluster should:

- Have 30 to 50 active Small Groups (300-400 farmers)
- Practices rotating leadership and servant leadership – rotate leadership through democratic elections every four (4) months.
- Meets regularly every month, and the meeting is well attended by Small Groups representatives.
- Has land to plant at least 200,000 trees, and has Small Groups actively planting and caring for their trees.
- Should have cluster members who work with Quantifiers to monitor each Small Group's results each year.

- Should ensure that all Small Groups are well trained about TIST, tree planting, and the carbon market.
- Account accurately and send accounting records every month
- Send monthly cluster meeting records every month
- Actively recruit new members to TIST.

Additionally, a self –governed cluster should be capable of ensuring:

1. Small Groups are well quantified in a transparent, accurate manner
2. Small Groups receive their trees payments transparently and in a timely manner
3. Each of the Small Groups meets weekly and practices rotational and servant leadership
4. Each of the Small Groups receives the *Mazingira Bora* Newsletter every month
5. Small Groups receive training and they are voluntarily practicing, sharing best practices such as Conservation Farming, energy efficient jikos, soil erosion control measures, and others.



Understanding Helped to Help (H2H) Conservation Farming: The current season participants.

The TIST Helped to Help program, called 'H2H', was developed to encourage farmers to try new best practices, and after successful effort, to share the benefit of the proven best practice with TIST neighbors. The TIST Program helps one member, and that person helps many more by passing on part of the benefits they received to others.

Through H2H, TIST members encourage the spread of best practices to more farmers with low administrative costs and high accountability and transparency. The costs remain low and the program remains sustainable. H2HTIST members will benefit from improved stoves and Conservation Farming opportunities in the next few months.

Here's how it works:

For the H2H CF Program, Pioneers who have prepared their fields, who have dug at least 750 CF holes, to plant CF will receive certified maize seed to plant. In return, they promise to follow best practices, train the next Participants and report on their crop yield.

If the CF harvest is successful, they will use the benefits of the improved yield to pass on certified seed to 3 other TIST members selected by their cluster. When these members receive the gift from the H2H Pioneer, they make the same promise. Participating in the H2H program will

mean a lot to TIST SG members and the entire world. A single pioneer will establish a long network of shared success!

Current season participants

Cluster Name	Number of participants
Mutuati/Kangeta	54
Kawiru MCK	105
Nkondi	16
Mitheru	11
Kianyaga	6
Antubochiu	4
Kinoro	15
Rwanyange	3
Githongo	4
Ikumbo	4
Limoro	1
Nkando	4
Ruiru	6
Ntumburi	16
Mworoga	2
Igwanjau	5
Nthangathi	2
Kiburine	1
Irindiro	4
Kamaroo	4
Kirindine	4
Nchiru	3

Planting season: Good indigenous trees to plant.

Indigenous trees are tree species that have developed in Africa and are well suited to the environment they developed in. They may improve soil and attract birds and helpful insects. Different trees will grow better in different places.

From TIST Seminars and Cluster meetings, TIST participants have identified types of indigenous trees that are very good and beneficial in their areas. Some of these are described below, and we thank the World Agroforestry Centre for this information on benefits and seed collection and preparation for success. Please consider some of them in your next planting season, and let us know some of the best kinds in your area!

a. *Prunus africana* (Kikuyu: Muiri, Kimeru: Mweria)

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 acts as a windbreak. Soil improver: Leaves can be used as mulch and green manure.
- **Ornamental:** It makes an attractive garden shade tree.

b. Peacock Flower (*Albizia gummifera*, Kikuyu: Mukurwe)

This tree is commonly found in lowland and upland rainforest and in open habitats near forests.

Fresh seeds need no pre-treatment. Stored seeds are soaked in warm water and left to cool to room temperature. 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 for at least 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.

c. *Olea africana* (African wild olive, Kikuyu: Mutamaiyu, Kimeru: Muthata)

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. This is because removing the endocarp can enhance germination. The 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 as 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.

d. Waterberry (*Syzygium guineense*, Kikuyu: Mukoe, Kimeru: Muriru)

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.



Plastics – the way to treat them and avoid harming the environment.

By Eunice Wambui

Look around you. Whether you are sitting, standing or walking, what do you see? There is litter everywhere. Almost everywhere, there are heaps of plastic materials.

Plastic bags have become a nuisance in many areas and a pollution problem. 100 million plastic bags are handed out each year in Kenya by supermarkets alone! They clog sewers and drains, pollute soil, harm fish and animals, and may kill livestock when they eat the plastic rubbish. Most of the bags are flimsy, and tear after a single use, and pieces of these plastic bags mix with soil and prevent rainwater from soaking into the ground. This hurts plant growth and also provides breeding ground for mosquitoes that carry malaria and for many waterborne diseases.

We in TIST have a responsibility of taking care of our environment in many ways besides planting trees. We have an important duty to make the environment clean, safe, and tidy and to encourage our neighbours to do the same.

We need to get rid of plastic bags so that our tree groves will be neat for people to admire, our

children and livestock will be safe and healthy, living in a clean and disease-free environment.

Some farmers in TIST use the “4 –Rs” method to address the plastic menace.

Re - use: Poly bags we have by taking them along to the store instead of accepting new ones.

Re-cyle: Instead of disposing of non-degradable poly bags, use them as poly tubes for seedlings and establishing a mobile nursery. You can also finger crochet them into a rope or other useful items. This is a low cost, high results re-use!

Reduce: Their hazards as much as possible by disposing the polythene bags by collecting them and burying them in one pit.

Refuse: Where possible refuse to use the polythene bags. When doing the shopping, it's better to carry a basket or reusable bag.

Let's all work to reduce the impact of plastic materials!

Keep eucalyptus trees away from riparian and water catchments areas.

By Joseph Gituma

We Igembe TIST farmers want to encourage our members and neighbours to begin conserving and protecting our rivers and catchment areas. At the same time, we want to discourage planting of eucalyptus trees in those areas mentioned above. We have already experienced diminishing water flow level in some of the rivers where eucalyptus

are common.

Plant many indigenous trees along streams and waterways to protect and improve our water and to make environment habitable and comfortable for fresh air

Together, we protect and conserve our rivers.



TIST Farmers to receive TIST's first incentive for protecting rivers through indigenous tree planting along riverbanks.

By Jeniffer Kithure

Dear TIST Farmers,

A long time ago, rivers were strong and we did not cut trees and cultivate along the riverbanks and wetlands. Today, we see too many rivers dying and drying because of bad practices.

TIST has developed a best practice of protecting our rivers by planting indigenous trees in riparian areas along rivers. With the next tree payments, five Small Groups will receive an additional incentive for their excellent groves of indigenous trees by rivers.

These best riparian groups are:

1. Kajoro group, 2008KE332 in Kianjagi cluster.
2. Kabari Musingi conservation group, 2008KE670 in Ngariama cluster.
3. Mwirutiri group, 2008KE2015 in Muthambi cluster.
4. Kerere women A group, 2008KE1191 in Njukiini cluster.
5. Ethi junior Group, 2010KE10 in Murungai cluster

Eustace Njeru is a member of Kajoro group, one of these best riparian groups. He planted 241 trees for TIST, and 201 of these trees are indigenous. He has planted muuru, meru oak, mutuja, *Brachystegia* and mukwega, *Bridelia taitensis*. He will use these trees for honey production, and will prune branches for fuel wood. These trees are now shading the bank of the Mara river. He and his group qualify for PES in the next payment. He says he will use the money for nursery expansion for planting more TIST trees. Njeru calls all TIST and all farmers of Kenya to action, "Let us work together to improve our rivers and our environment by planting more indigenous trees".

Other members of these riparian groups say they are interested in protecting and improving rivers to reduce soil erosion and to serve as an example so that more members will follow these good practices. They are planting indigenous trees, bamboos, and grasses to stabilize riverbanks. They say that they joined TIST to take part in the carbon credit business, to plant more trees, and to work together to improve the environment. They look forward to the extra income they will receive from the indigenous tree payment for environmental services (PES), and also to the many benefits they and communities enjoy from

protecting important water sources. They call to everyone living near rivers work together to protect our rivers so we will have better quality and quantity of water and decrease water borne disease.

These farmers are taking important action to conserve our water source, so they are not contaminated, to save the environment. The trees and shrubs cover and cool the surface of the earth, and when the ground stays cooler, and roots make the soil porous, the ground holds more moisture longer. This means the water-friendly indigenous trees can help improve the amount of water in the and also soil also improve the quality and quantity of water. This will help provide good water for people and animals downstream.

Our dear farmers, let us be ready to protect our rivers, streams, and wells. If we are not serious about protecting our rivers, the dangers of severe water stress will increase. More arid and semiarid land areas may become deserts, and fertile areas will suffer, too. Many people will have to leave their homes to search for water, and so bring conflict to the upstream people. Let us be kind to our children and grandchildren, so they may have fertile soil, good water, and a beautiful environment they will enjoy.

How can I take part?

A GOOD RIPARIAN INDIGENOUS TREES GROVE.

1. No cultivation within 30m of river in the grove.
2. No eucalyptus within 100m of the river in the grove.
3. Do not cut down or clear existing indigenous vegetation or ground cover.
4. Over 30% of the grove must be planted indigenous trees.
5. Plant water friendly trees and grass within 30m.
6. Proper spacing of 2m and above according to the species.

If you have met the above qualifications, and you would like to participate as a riparian farmer, ask your cluster representative, quantifier, or Jeniffer at 0726319539. If your grove is quantified, you may also receive this additional PES and serve as an example for farmers throughout Kenya.

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Kimereu Version

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Antubochio TIST Cluster members during their monthly cluster meeting.

Picture by William Mugambi

Inside:

Gutiia muthomi Wangari Mathai, anda miti ingi mironko mugwanja na jumwe muundene jwaku mburene iji. Pg. 2

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Kuelewa mubango jwa Tethua Utethie jwa urimi bubwega: Baria bari mubangone juju mbura iji. Pg. 3

Igita ria kuanda: Miti ya gintwire imiega iria uumba kuanda. Pg. 3

Mibira- njira ya kumitumira na kueba kugitaria naria gututhiurukite. Pg. 5

Lika mibao gataria kuuma rutere rwa ruuji na biumo bia nduuji. Pg. 5

Arimi ba TIST nibakunenkerwa mbeba cia mbele cia mubango jwa kumenyeera nduuju gujururira uandi bwa miti ya gintwire nterene cia nduuji. Pg. 6



Gutiia muthomi Wangari Mathai, anda miti ingi mirongo mugwanja na jumwe muundene jwaku mburene iji.



Batwi ndene ya TIST nitukugwatanira na nthiguru yonthe kwithikira niuntu bwa gukua kwa muntu umwe umunene ndene ya umenyeeri bwa naria gututhiurukite, muthomi Wangari

Mathai. Naambiririe gikundi kia Greenbelt Movement mwaka jwa ngiri imwe Magana kenda na mirongo mugwanja na mugwanja na aari murungamiri umunene kiri utumiri bwa into biria tuei na njira injega, nikenda tuumba gukara nabio igita ririnene, tuumba kung'anana na kugia ugambi bubwega. Amemba ba TIST na kambuni yongwa niyakaraniritie na Professor Mathai ikarirone bibingi aria twariririe njira mwanya cia gukinyira kioneki giki gietu twinthe gia gutuma antu bonthe bathongomia naria gututhiurukite na miturire yetu.

Ni gintu kirina murimo mono ati Professor Mathai natutigite. Tugeta na mbele na ngugi inthongi ya gukaria na kumenyeera naria gututhiurukite na kinya ntukune iria cijite.

Mbura iji, nitukuria o umwe o amemba ba TIST aande miti ingi mirongo mugwanja na jumwe, kiri gutia na kurikana miaka mirongo mugwanja na jumwe ya utuuro bwa muthomi Professor Mathai.

Mung'uanano, kethira ubangite kwongera miti igana mbura iji, anda miti igana na mirongo mugwanja na jumwe. O mumemba wa TIST ndene ya Kenya agetikira kuthithia uju kiri kumwikira Professor Mathai na njira iji, tukethira turina nkuruki ya miti milioni ithatu na ngiri Magana jatano imieru, mwitu jumuthongi niuntu bwa muturire jumuthongi.

Ririkana ati muthomi Mathai ari mumenyi wa miti ya gintwire. Naugire, "Riria nkwenda gukenera gintu, gampanaga muti rionthe. Na kwou ndacua muti jwa gintwire, Nandi flame, juri kiuwa giki gigitune gikithongi. Riria jurina maua jukaraga jaka jugwakana rumuri."

Itu thuganiria kuanda miti ya gintwire imingi uria ukomba.

Tugekira gathetine mariitwa ja arimi na miti iria arimi ba TIST baandite niuntu bwa gutia Professor. Kethira nukwenda gutonyithua kiri ' Ngugi ya gutiia Professor Wangari Mathai, andika ntumwa ya thimu irina riitwa riaku, riitwa ria cluster yaku na miti iria uandite kiri namba iji 0718790007 (ntumwa cia kuandika aki).. Tuma jaja mbele kana tariki ikumi na ithano mweri jwa ikumi na jumwe, mwaka juju. Jaja jagekirwa kiri gatheti ya Mazingira Bora ya Mweri jwa ikumi na ijiri mwaka juju

Gukuria muradi jwa TIST: Ithira bwithuranirite gutegerwa ngugi ya cluster nikenda buumba guciatha.

Igita ritukuraja, cluster cia TIST igategerwa ngugi kuthima witi na mbele bwao gutegera kua cluster cirina inya iria ciumba guciatha. Cluster iguciatha ni kioneki kia muthia gia TIST na igatethia kumenyeera ati utumiri bwa mbeba buri nthi nikenda baita cia arimi ciumba kunenea. Cluster iria igakuruka utegi ngugi bubu ikaona baita inyingi na muthiene ciitikirue guciatha ciaongwa. Utegi ngugi bubu bugatega mono kumenya kethira cluster ina inya ing'ani kuritira amemba bayo yongwa ngugi. Cluster irina inya niibati:

- Kwithirwa iri na ikundi mirongo ithati gwita mirongo itano biria biithagirwa biri mantune ja cluster o igita o igita (arimi Magana jathatu gwita janna)
- Ithirwe irina utongeria bwa kithiuruko- utongeria buthiurukue gukurukira kura o mieri inna yathira.
- Igucemania rionthe o mweri, na mucemano jwithirwe jurina arungamiri ba ikundi bibinini.
- Irina muunda jwa kuanda miti nkuruki ya ngiri Magana jairi na irina ikundi bibinini biria biritaga ngugi ya uandi na umenyeeri bwa miti yao rionthe.
- Ithirwe irina amemba ba cluster baria baritanagiria ngugi na Atari miti gutegeera mantu jaria o gikundi

gikinini kiumbite kuthithia o mwaka.

- Niibati kumenyeera ati ikundi bibinini nibiritani bwega kwegia TIST, uandi miti na thoko ya ruugo.
- Yumbe kuthithia bwega na gutuma mauku jegie utumiri bwa mbeba o mweri
- Itume ripoti cia micemano ya cluster ya o mweri.
- Ithirwe igitonyithagia amemba baberu rionthe ndene ya TIST

Kwongera, cluster iguciatha no mwanka yiumbe kumenyeera ati:

1. Ikundi bibinini nibitariri miti na njira ya weru na ya uuma
2. Ikundi bibinini nibikuriwa na weru na igita ririo
3. O gikundi nigigucemania o kiumia na nigikuthiurukia utongeria na barina utongeria bwa uthumba.
4. O gikundi gikinini nigigukinyirwa ni gatheti ya Mazingira Bora o mweri.
5. Ikundi bibinini nibikuritanwa na nibakuthithia bakiendaga na kugaana mitire imiega ya kuthithia mantu ta Urimi bubwega, mariko ja gutuumira mariko ja nkuu inkai, njira cia kunyiyia ukamati bwa muthetu na jangi.



Kuelewa mubango jwa Tethua Utethie jwa urimi bubwega: Baria bari mubangone juju mbura iji.

Mubango jwa TIST jwa Tethua Utethie, H2H, jwambirirue gwikira arimi wiru bwa kugeria njira injeru iria njega buru cia kuthithia mantu, na nyuma ya ngugi ya inya irina maketha, kugaana baita cia njira iria cigeretua naciabua injeru injega buru na aturi ba TIST. Mubango jou jwa TIST nijutethagia mumemba umwe, na muntu ou agatethia bangi babaingi gukurukira kunenkaniria kana baita imwe cia iria boonete kiri bangi.

Gukurukira H2H, amemba ba TIST nibekagira inya gutamba kwa miitire iria miega buru ya kuthithia mantu kiri arimi bangi na njira itigutumira mbeba inyingi na kumenyeera mauku ja utumiri mbeba na kurita ngugi na weru. Mbeba iria citumagirwa nicikaraga cirri inkai na mubango jugeta na mbebe kuumbika. Arimi ba TIST ba H2H bakoona baita kuumania na mariko jagutumira nkuu inkai na jatina toi na twanya twa urimi bubwega mieri imikai iijite.

Uju niu mubango juju juritaga ngugi:

Kiri mubango jwa Tethua Utethie jwa urimi bubwega, baria bakaambiria ni baria bathuranirite miunda yao, nabaria beenjite marinya nkuruki ya Magana mugwanja ja kuanda na urimi bubwega, bakaewa mpempe cia kuanda. Gucokia, bageka wirane kuthingatira mitire iria miega, kuritana baria bakenda gutonya mubangone juju riu ringi na gucokia ripoti ya maciara ja imera biao.

Kethira maciara ja urimi bubwega jakethira janenei, bagatumira baita iria yongerekete kiri maciara kuejana mbeu ingi cia kuanda kiri amemba bangi bairi ba TIST baria bagatarwa ni cluster yao. Amemba baba boona kiewa kuumania nab aria baambiritie mubango,

bageeka wirane ota bou bangi bekire. Gutonya mubangone juju jwa H2H bukethirwa buri gintu kinene kiri amemba ba TIST ba ikundi bibinini na nthiguru yonthe.

Mwambiria agatuma antubabaingi bagaane mantu jamanene.

Baria bari mubangone juju mburene iji

Riitwa ria cluster mubangone	Antu baria bari
Mutuati/Kangeta	54
Kawiru MCK	105
Nkondi	16
Mitheru	11
Kianyaga	6
Antubochiu	4
Kinoro	15
Rwanyange	3
Githongo	4
Ikumbo	4
Limoro	1
Nkando	4
Ruiri	6
Ntumburi	16
Mworoga	2
Igwanjau	5
Nthangathi	2
Kiburine	1
Irindiro	4
Kamaroo	4
Kirindine	4
Nchiru	3

Igita ria kuanda: Miti ya gintwire imiega iria uumba kuanda.

Miti ya gintwire ni mithemba ya miti iria iumite Africa na ikubuirwa ni rera na naria yakurire. No ithongomie muthetu na igakucia nyoni na tunyomoo turina baita. Miti mwanya igakura bwega guntu mwanya.

Kuumania na semina na micemano ya cluster cia TIST, arimi ba TIST nibataarite miti ya gintwire mithemba mwanya iria ibui mono na irina baita ntuurene ciao. Miti imwe ya iji niariritue aja nthi, na nitugucokeria kambuni ya World Agroforestry Centre nkatho niuntu bwa kugaana umenyo bwa baita na kwoja mbeu na kuthuranira niuntu bwa gwita na mbebe itu thuganiria kuanda imwe ya yo riu ringi ukuanda, na gaana natwi kwegie miti imwe ya iria mithongi buru ndene ya ntuura yaku!

a. *Prunus africana* (Kikyuyu: Muiri, Kimeru: Mweria)

Muti juju jwa gintwire jwonekaga mono ndene ya miitu. Mpindi niciithagirwa cirri miitune igita riria kuumi. Oja ntunda iria aki cigarukite rangi ciairua na iria cigundi kuuma kiri muti kana nthiguru.

Rita kiu kithiurukite mpindi na njira ya kurinda tunda mathaa mirongo iri na jannariu unyarie iguru ria wire. Ara utirikanirite antu ari na ruugo na kirundu nikenda ciuma- indi ugakurukia mathaa janna. Mpindi itiumbaga gwikwa kwou tumira woja orio. Gukunikira mbegu na mabura jarina ruuji nikunyiagia kuura kwa ruuji igitene ririkai ria gukamata na gwika. Anda munandene kana maratasine. Kuuma kwijaga nyuma ya biumia bitantatu gwita banana.

**Utumiri:**

- **Kwinga tunyomoo turia tugitaragia:** No juinge tunyomoo tumwe turia tugitaragia imera niuntu bwa mununko jwaju. Maua jarina sukari ya kung'ana kuthithia naicu. Jurina nkuu injega mono.
- **Ndawa:** Ruuji kuuma gicaune nirutumagirwa kworia kunenea kwa prostate. Mathangu nijatumagirwa gukucia niuntu bwa gwitia kwa mwanki jwa mwiri kana jakanyuwa jakimenuwe nikenda muntu omba kwenda kuria irio. Ruuji nirwongagirwa kiri gicau gikimenuwe, na ruuji ruru rutune nirutumagirwa kworia kiu; gicau no gitumirwe kiri ndithia
- **Kunyiya ukamati bwa muthetu:** Miti noiandwe nterene cia mitaro na naria kwinji, niejanaga kirundu kiri na baita na ninyiagia ruugo. Nijuthongomagia muthetu: Mathangu no jatumirwe gukunikira muthetu na ta mboleo imbithi
- **Kuthongomia:** Nijuejaga muti jumuthongi jwa kuanda kienine jwa kuejana kirundu.

b. Peacock Flower (Albizia gummifera, Kikuyu: Mukurwe)

Muti juju mono nijwonekaga naria gutina ibari na miitune iria iri guntu kwa mbura na ndene ya mathaka jaria jatirimagwa akui na miitu

Mpindi cioji orio itiendaga uthuraniri. Mpindi (mbegu) iria ikarite cieki nicirindagwa ruujine rwa murutira na rugatigwa kworia mwanka mwanki jwa nyomba. Gikonde kia mpindi no gikunywe aria mpindi yumagira nikenda yumba kuumanga. Mpindi niurangaga, na ntuku ikumi. Mbeu niibati gutua cirri mutine nikenda tunyomoo tutikacigitarie. Mpindi no ciikwe nkuruki ya mwaka aki ciekiwa antu gukuumo na aria gutina tunyomoo na njira ya kwongera muju jwa riiko.

Utumiri:

- **Nijutumagirwa ni njuki kuthithia naicu, nkuu, mpao, gum, tannin, ndawa** -kuumania na mpindi cikimitwe nicinyunyagwa kworia thina cia kiu na ruuji kuumania na gikonde kia muti rugatumirwa kworia rwagi, Kunyiyia ukamati bwa muthetu (uria miri iri nigutethagia kugwata muthetu na kunyiyia ukamati bwa ruuji ni ngai),
- **Kirundu**, gwikira ruugo rwa Nitrogen muthetune (kuthongomia muthetu), kuria kujukagua kuri njira inthongi ya gukunikira muthetu niuntu mathangu nijaguaga jamaingi igitene riajo riakugua,
- **Kuthongomia** (Nijuandagwa njirene ya town niuntu bwa uthongi bwaju),
- **Kuanda mianka**, Mathangu nijatumaga marigu jakagundanga.

c. Olea africana (African wild olive, Kikuyu: Mutamaiyu, Kimeru: Muthata)

Muti juju nijwonekaga guntu gukwingi mono akui na nduui na nterene cia miuro iminini n kinya ndene ya miitu ya mpao iminene. Jutigitaragua ni mpio inyingi kana uumo.

Mpindi ciumite muundene orio nicitumagirwa kuanda. Mpindi inkuru no cirindwe ruujine rwa mpio ntuku ijiri. Mpindi niciambagwa kuthuranirwa na njira ya kuuna gikonde na gantu ga kugwata na njara kana kwingiritiria iiga iguru ria mpindi iu. Bubu nibuthithagua niuntu kurita gikonde giki nigutumaga muti jukaumanga. Mpindi iji no ciikwa atu gukuumo miaka imikai.

Utumiri:

- **Irio:** Biria muti juju juejanaga na wingi ni maguta na ntunda cia kuria. Imera bibi nibirijagwa ni ndithia mono. Kinya nijutumagirwa ta nkuu, mpao, makara, mirashi ya maigo na kuthongomia.
- **Gucokia uria munda jwari:** Uumbi bwaju bwa gutuura kinya igita ria uumo nibutumaga jukaa muti jumwega jwa kuanjia miitu kairi guntune gukuumo ndene ya Africa.
- **Kuthongomia:** Muti juju nijuumbaga kuthongomia uria muunda jukari

d. Waterberry (Syzygium guineense, Kikuyu: Mukoe, Kimeru: Muriru)

Muti juju nijwonekaga ndene ya miitu ya mbura iria iti irimene na kinya iria iri irimene. Mono niurangaga guntu kurina ruuji rionthe, mono kinya ndene ya ruuji, na niithagirwa mono nterene cia nduui inini.

Mbegu itiendaga kuthuranirwa mbele ya kuandwa, niuntu kuuma nikwijangaga na kwambagiria o rimwe.

Nijukurangaga niuntu nijwithagirwa jukunenea mono ndene ya ntuku mirongo iiri gwita mirongo itano. Kuanda o rimwe turatasine nigwiikagirwa.

Matunda nijathukangaga na kwou nijabati kwojangwa nthi jarikia kugua orio.

Kinya nojojwe warikia kwinainia muti na rwogoro. Joojwa, matunda jaja nijabati kuandwa orio niuntu nijathukangaga jooma. Kethira bubu butiumbika, itunda noriikwe ntuku inkai jaumbiki kiri sawdust na jari mikebene itikuniki nyomba iri na ruugo rurwega

Utumiri:

- Kuthithia naicu,
- Nkuu,
- Ndawa
- Mpao,
- Kirundu

Menyeera:

Gicau kiu kiri sumu nikirikanite no gitume muntu akue, kwou nubati kwamba kuuria baria batumirite gikonde pkia muti juju kiri kuthithia ndawa



Mibira- njira ya kumitumira na kuebera kugitaria naria gututhiurukite.

Ni Eunice Wambui

Tega akui nagwe. Kethira gukari nthi, kurungi kana gwitite, imbi ukwona?

Kurina ruuko kuunthe. Akui kunthe, kurina biumbwa bia into bia mibira.

Maratasi ja mibira nijaete bata guntu gukwingi na thina inene kiri naria gututhiurukite. Maratasi ja mibira milioni igana nijanankanagirwa ndene ya Kenya ni nduka inene cia supermarket cionka! Nijaingaga mibaibu na naria nduuji ibati gwitira, jakathukia muthetu, jakagitaria makuyu na nyomoo na nojorae ndithia riria ciaria. Jaria maingi nijamotho na nijagitukaga jatumirwa rimwe, na ing'enyua bia maratasi jaja nibiunganaga na muthetu na igatuma ruuji rukaremwa gutonya muthetune. Bubu nibugitaragia gukura kwa imera na kinya gukaa antu a guciarania kwa rwagi ruria rukamataga murimo jwa rwagi na kinya kwa mirimo imingi iria igwatithanagua gukurukira ruuji.

Batwi ndene ya TIST nitubati kumenyeera naria gututhiurukite na njira inyingi amwe na uandi miti. Turi na ngugi tubati kuthithia ya kumenyeera ati naria gututhiurukite ni gukutheru, gutitugitaria na nikubanganitue na tugekira wiru aturi betu kuthithia o uju

Nitugwitia kurekana na maratasi ja mubira nikenda miunda yetu ya miti ikethirwa ithongi kiri antu gutege, aana na ndithia cietu itigitara na igakara

cirina thiria, igikaraga antu atheru na aria gutina mirimo ikaigwata.

Arimi bamwe ndene ya TIST nibatumagira njira ya R inya kumenyeera thina iji ya maratasi ja mibira

Re – use (Tuumira kairi): gwita na maratasi ja mibira jaria turi najo ndukene antua kujukia jangi jameru.

Re-cyle (Tumira kairi na njira ingi): Antu a guta maratasi ja mibira jaria turinajo, jatumire kuandira miti na kwambia munanda jwa gukamata. No kinya ujatumanirie ta ndigi na uthithie mukanda najo kana kinya gintu kingi. Iji ni njira ya gutumira mbeca inini, na kuthithia mantu jamanene!

Reduce (Niyia): Niyia mantu jamathuku jaria jomba kuthithia gukurukira kujothurania amwe na kujathika jonthe kirinyene kimwe.

Refuse (Rega): Aria ukomba rega gutumira maratasi ja mubira. Riria ukugura into, ikaba ukamate kitheti kana kiondo uumba gutumira nkuruki ya rimwe.

Turiteni ngugi twinthe kunyiyia mantu jamathukuj jaria mibira ithithagia!

Lika mibao gataria kuuma rutere rwa ruuji na biumo bia nduuji.

Ni Joseph Gituma

Batwi arimi ba TIST ba Igembe nitukwenda gwikira amemba betu na aturi betu wiru bwa kumenyeera na gukaria nduuji cietu na biumo bia nduuji cietu. Igitene o rimwe, nitukwenda kurega uandi bwa mibao kiri guntu kou kwiranitue au iguru. Nitwonete mwanka thaa iji uria ruuji ruria rukwinama miurone rugwita rukinyiaga ndene ya miuro imwe naria mibao iri imingi

Anda miti imingi ya gintwire nterene cia nduuji inini na naria ruuji rukurukagira nikenda tukaria na tuthongomia na tuthithia naria gututhiurukite kuumba gukarika na kumarira kuri na ruugo rurutheru

Amwe, tugakaria na kumenyeera miuro yetu.



Arimi ba TIST nibakunenkerwa mbeba cia mbele cia mubango jwa kumenyeera nduuju gujururira uandi bwa miti ya gintwire nterene cia nduuji.

Kiri arimi ba TIST,

Ni Jeniffer Kithure

Igita riraja rithiri, miuro ya nduuji niyari na inya na tutagiitaga miti kana turima nterene cia nduuji na guntu kurina ruuji. Narua nitukwona nduuji inyingi mono igikua na ikinyara niuntu bwa mitire imithuku.

TIST niambiritie mwitire jumwega jwa kumenyeera miuro yetu gukurukira kuanda miti ya gintwire nterene cia nduuji. Kiri kuriwa mbeba cia miti kuria kwijite, ikundi bitano bikongerwa mbeba niuntu bwa miunda yao imithongi ya miti ya gintwire akui na nduuji.

Ikundi bibi biria birina miunda iria miega buru ni:

1. Kajoroge group, 2008KE332 ndene Kianjagi cluster.
2. Kabari Musingi conservation group, 2008KE670 ndene ya Ngariama cluster.
3. Mwirutiri group, 2008KE2015 ndene ya Muthambi cluster.
4. Kerere women A group, 2008KE1191 ndene ya Njukiini cluster.
5. Ethi junior Group, 2010KE10 ndene ya Murungai cluster

Eustace Njeru ni mumemba wa gikundi gia Kanjoroge, kimwe kia ikundi bibi biega buru. Naandire miti Magana jairi mirongo inna na itano niuntu bwa TIST na miti Magana jairi na jumwe ya iu ni miti ya gintwire. Naandite Muuru, Meru Oak, Mutuja, *Brachystegia* na Mukwego, *Bridelia taitensis*. Agatumira miti iji kuthithia naicu na agatumira biang'i biria bikagitwa ja nkuu. Miti iji nandi nikunikirite nteere cia muuro jwa Mara. We na gikundi kiawe niboombene na bakoongerwa mbeba igitene ria kuriwa. Ariuga agatumira mbeba iu kuneneyia munanda jwa kuanda miti ingi ya TIST. Njeru nakuuria TIST yonthe na arimi ba Kenya kujukia itagaria, "Turitanireni ngugi amwe kuthongomia nduuji cietu na naria gututhiurukite gukurukira kuanda miti ingi ya gintwire."

Amemba bangi ba ikundi bibi biri nterene cia nduuji nibakuuga barina bata ya kumenyeera na kuthongomia miuro nikenda banyiyia gukamatwa kwa muthetu na kua mbicha injega nikenda amemba bangi bakathingata miitire imiega. Nibakuanda miti ya gintwire, mirangi na nyaki nikenda bakarikia nteere cia nduuji. Nibakuuga ati batonyere ndene ya TIST nikenda batonya thokone ya ruugo, baanda miti ingi na baritaniria ngugi amwe kuthongomia naria kubathiurukite. Nibeterete mono mbeba iu ciongerekete iria bakoona kuumania na uandi miti ya gintwire niuntu bwa kumenyeera naria gututhiurukite (PES), na kinya kiri baita inyingi iria bonaga na ntuura yonaga kuumania na kumenyeera biumo bia nduuji.

Nibakuria muntu wonthe uria ukaraga akui na miuro kuritaniria ngugi amwe kumenyeera miuro yetu nikenda tukethirwa turi na ruuji ruruthongi na rurwingi na tunyiyie mirimo iria igwatithanagua gukurukira nduuji.

Arimi baba nibakujukia itagaria ria bata kumenyeera kiumo gietu kia ruuji, nikenda ruuji rutigekirwe ruuko nikenda tukaria naria gututhiurukite. Miti na ithaka nikunikagira na igekira mpio nthi, na riria nthi yakara irina mpio, na miri igatuma muthetu jukagia ikutho, nthi niikaga ruuji igita ririnene nkuruki. Guku nitakuuga miti ya gintwire iu ikaranagia bwega na ruuji no itethie kwingiyia ruuji ruria ruri muthetune na kinya uthongi na wingi bwa ruuji rou. Bubu bugatethia kuaa antu na nyomoo ruuji rurwega ruujine rou gaiti nkuruki.

Arimi betu eendwa, twithirweni turitayari gukaria miuro yetu iminene, iminini na ithima. Twethira tutikirite ubatu bubwingi gukaria miuro yetu, kugitarua gukurukira kunyia kwa ruuji gukaingia. Guntu gukwingi gukuumo kuria gutionang'aga ngai no kuume buru na kinya naria kunori gukagitara kinyaku. Antu babaingi bagatiga nja ciao betite gucua ruuji na bubu noburete ndua kiri antu baria bari miurone bwaruguru. Tueni babega kiri aana na aana ba aana betu, nikenda bakethirwa barina muthetu jumunoru, ruuji rurwega na naria kuybathiurukite gukuthongi na bakagwirirua.

Niatia mpumba gutonya?

Munda jumwega jwa rutere rwa ruuji jwa kuanda miti ya gintwire.

1. Gutukurima mwanka 30m kuuma kiri muuro ndene ya muunda juju
2. Gutu mubao mwanka 100m kuuma kiri muuro ndene ya muunda juju.
3. Ukagiita kana urita ithaka biria biturite o bia gintwire na biria bikunikirite muunda
4. Nkuruki ya miti mirongo ithatu kiri o igana ndene ya muunda juju iria iandi no mwanka ithirwe iri ya gintwire
5. Anda miti na nyaki iria ibujanagira na ruuji mwanka 30m kuuma kiri muuro.
6. Miti itaranie bwega na nkuruki ya 2m kuringana na muthemba.

Kethira nuujuritie jaja jonthe na wenda gutonya wa murimi wa rutere rwa ruuji, uria murungamiri wa cluster yaku, mutari miti kana Jeniffer na namba iji 0726319539. Muunda jwaku jwatarwa miti, no wone kinya mbeba ingi cia PES na ukajukua uri mung'uanano kiri arimi ndene ya Kenya.

Mazingira Bora



TIST

The International Small Group & Tree Planting Program
www.tist.org

Kikuyu Version

An Environmental, Sustainable
Development and Community Forestry
Program.



Antubochio TIST Cluster members during their monthly cluster meeting.

Picture by William Mugambi

Inside:

Niguo kuririkana Professor Wangari Maathi, handa miti 71 makiria mugunda-ini waku kimera giki. Pg. 2

Gukura gwa TIST: wiharirie niundu wa gwiwo mathabu niguo cluster yaaku itikirike hari kwirugamirira. Pg. 2

Kumenya Help to Help thiini wa Kilimo Hai, aria mari kuo kimera giiki. Pg. 3

Kimera gia kuhanda: miti miega ya kuhanda ya kinduire. Pg. 3

Plastics – njira ya guikara nacio tutaguthukia riera. Pg. 5

Nituninemiti ya mibau kuria kwaraga muno na kuria njuui ciumaga. Pg. 5

Arimi a TIST kwamukira iheo niundu wa kugitira njuui na kuhanda miti ya ki-nduire njuui-ini. Pg. 6



Niguo kuririkana Professor Wangari Maathi, handa miti 71 makiria mugunda-ini waku kimera giki.



Ithui thiiini wa TIST nituranyitanira na thi yothe hari gucakaya ni gikuu kia Professor wangari Maathai. Ambiriirie gikundi kia Green Belt mwaka-ini wa 1977 na agituika muteteri wa umenyereeri wa maria maturigiciirie na kihooto na uigananu. Amemba a TIST nimakoretwo na mweke wa kwaraniria na Professor kundu kuingi na makaririria njira ngurani cia kugia na kioneki kimwe gia gwikira andu hinya niguo kwagirithia mari amturigiciirie hamwe na miturire iitu.

Ni uhoro wa kieha ati Prof. Maathai niatutigite. Nituguthii na-mbere na wira mwege wa kugitira na kumenyerera maria maturigiciirie.

Kimera giki gia kuhanda, nituroria arimi a TIST mahande miti 71 makiria niguo kuririkana miaka 71 ya Prof. Maathai. Kwa muhiano, angikorwo urenda kuhanda miti 100 kimera giki, handa miti 171.

Angikorwo urenda kuhanda 1,000, handa 1071. Angikorwo arimi oothe a TIST Kenya nimagwitikira gwika uu, nitugukorwo na miti 3 Million mieru niguo tuthondeke ithaka na mititu iitu.

Ririkana Prof. Maathai niekagirira muno uhandi wa miti ya ki-nduire. Na akiuga, “riria ndirakenera kindu, nyendaga kuhanda muti. Na ngigia na muti wa ki-nduire witagwo Nandi flame na riria waciara mahua ukorago uhana mwaki.”

Geria kuhanda mit miingi o uria kwahoteka.

Nitukwandika maritwa ma arimi na namba ya miti iria maha.ndite makiririkana Professor. Angikorwo niukwenda kwandikwo thiiini wa ‘Roll of Honour for Professor Wangari Maathai’, andika SMS na riitwa riaku, riitwa ria cluster yaaku na muigana wa miti iria uhandite kuri 0718790007 (andika SMS). Tuma muthenya kana mbere ya 15th November 2011. Maritwa makandikwo ngathitiini ya December 2011.

Gukura gwa TIST: wiharirie niundu wa gwiwo mathabu niguo cluster yaaku itikirike hari kwirugamirira.

Kahinda gatari haraya, cluster nicigwikirwo mathabu niguo cimanyeke uria ciratii na-mbere gukinyiria kwirugamirira. Kwirugamirira gwa cluster nikio kioneki gia TIST, na guteithia kunyihia mahuthiro niguo murimi agie na ,arihi mega. Cluster iria ikuhituka ikiro icio nicikugia na maundu maingi mega ohamwe na kwirugamirira. Audit ino igukorwo ikirora kana cluster iri na uhoti muiganu wa kwirugamirira na ikiro nita;

- Ikorwo na ikundi nini 30-50(ikorwo na arimi 300-400)
- Ikorwo na utongoria wa guthiururukana na wa kwirutira – utongoria uthiururukio na njira ya kihooto na ithurano o thutha wa mieri 4.
- Cluster icemanie o mweri na ikundi ikorwo irugamiriirwo weega
- Ckuster ikorwo ihandite miti itanyihire 200,000, na ikorwo na ikundi iratungata miti ino.
- Ikorwo na amemba marateithiriria Atari a miti hari kuhariria report ya o mwaka.

- Ikundi nini cithomithio uhoro wa TIST, uhandi wa miti na thoko ya carbon.
- Ikorwo na mathabu mega na mandike report ya mweri.
- Itume report ya micemanio o mweri.
- Maingirie ameba aingi eeru.

Na ningi, cluster irerugamirira yagiriirwo nigukorwo na uhoti wa gutigirira ati;

1. Ikundi nini niciatarirwo miti na njira ya utheri na nginyaniru.
2. Ikundi nini niciamukira marihi kahinda karia kagiriire.
3. O gikindi kinini gigacemania o kiumia na makorwo na utongoria wa wakwirutira.
4. O gikundi gigakinyirwo ni ngathiti ya Mazingira Bora o mweri.
5. ikundi niciathomithio na ciirutire gukorwo namitaratara miega na guthomithia aria angita Kilimo Hai, riiko ritarahuthira hinya muingi, kugitira tiiri namangi maingi.



Kumenya Help to Help thiini wa Kilimo Hai, aria mari kuo kimera giiki.

Mutaratara wa TIST wa Helped to Help uria uikaine ta 'H2H' wathondekiro niguu gwikira arimi hinya magerie maundu meeru na mgia na maciaro maingi mathomithie aria angi. Mutaratara wa TIST uteithagia mumemba umwe na ke agateithia angi aingi.

Kuhitukira H2H, TIST ni hinyagiriria urimi mwega kuri arimi aria angi ikihuthira mbeba nini hari gutheremia uhoro ucio. Mahuthiro makanyiha na TIST ikahota kwirugamirira. Amemba a TIST aria makoragwo thiini wa H2H nimeguteithika na riiko na mweke wa Kilimo Hai hari miri yuukite

Uu niguu ithiaga:

Hari mutaratara wa H2H CF, aria mambiriria aria maharirie migunda yao, na magakorwo na marima matanyihire 750, ma kurima Kilimo Hai nimakuheo mbembe njitikiriku cia kuhanda. Nao maheane na matho ithnie mawega kuri arimi aria makurumirira.

Magetha amkorwo mari mega, nimakaheana mbegu cia kuhanda kuri arimi angi atatu mathuritwo kuma cluster yao. Nao armi aya mamukira iheo ici kuma kuri ambiriria a H2H, matwarithie uhoro ucio na mbere. Kunyitanira na H2H ni kwa bata kuri ikundi nini cia TIST na thi yoothe. Mwambiriria

umwe niaguthondeka network nene.

Aria mari a kimera giiki

Cluster Name	Number of participants
Mutuati/Kangeta	54
Kawiru MCK	105
Nkondi	16
Mitheru	11
Kianyaga	6
Antubochiu	4
Kinoro	15
Rwanyange	3
Githongo	4
Ikumbo	4
Limoro	1
Nkando	4
Ruiru	6
Ntumburi	16
Mworoga	2
Igwanjau	5
Nthangathi	2
Kiburine	1
Irindiro	4
Kamaroo	4
Kirindine	4
Nchiru	3

Kimera gia kuhanda: miti miega ya kuhanda ya kinduire.

Miti ya ki-nduireni miti iria ikuriire Africa na imenyere riera ria kuo. Niithondekaga tiiri na kuguciriria nyoni na tutambi turia tuteithagia. Miti ngurani niigukura kundu ngurani.

Kuma semina cia TIST na micemaio ya cluster, arimi a TIST nimahotete kwona miti iria miega ya ki-nduire na iguteithia kwanyu. Imwe ya miti ino nimigwete haha muhuro na nituracokeria World Agroforestry Center niundu wa uhoro uyu wa mawega na ungania wa mbegu na kuhariria. No uhande imwe yayo.

a. *Prunus africana* (Kikyuyu: Muiri, Kimeru: Mweria)

Muti uyu wa ki-nduire muno wonekaga mutitu. Mbegu niconekaga mutitu kimera kia riuu.

Ungania mbegu iria cia brown biu, matunda maria Ehutia gothi ya iguru na kurinda maai-ini kahinda ka 24hrs, na ucoke uthambirie iguru wa mesh wire. Aragania handu hari an riera riiganu na kiruru niguu ciime – gwa kahinda ka 4hrs tu. huthira mbegu iria fresh. Kwoha mbegu na mahuti nikwongagirira ugunyu. Ita tutaiini na weterere imere gwa kahinda ka 6-8 weeks.

Mahuthiro.

Kuingata tutambi: muti uyu niuingataga tutambi ta aphids na nematodes turia tuthukagia irio. Mahua maguo nimaha.uthagirwo ni njuki guthondeka uuki na ugakorwo na ngu njega.

Dawa: maai maguo nimathondekaga dawa ya guthondeka uciari. Mahuti nimahuthagirwo kuhonia oma kana kwongerera appetite. Maai



mongagirirwo makoni-ini na maai macio matune makahuthirwo kuhonia nda na mahiu.

Kugitira tiiri: muti uyu nouhandwo kundu kuinamu kugitira tiiri na gwikira kiruru ona kunyihia ruhuho. Niuthondekaga tiiri na mahuti makahuthiro kuhumbira tiiri na guthondeka thumu.

Guthakaria: niuthondekaga mugunda muthaka.

b. Peacock Flower (*Albizia gummifera*, Kikuyu: Mukurwe)

Muti uyu wonekaga mitituini iria yuikaine ta lowland na upland forests na kuria kurigiciirie.

Mbegu iria ciumite muti iguru citibataraga guthondekwo no ciendaga kurindwo maai-ini mararu na cikarekwo cihehe. Nowehutie ngothi ya iguru kamera-ini niguo cimere na-ihenya. Mbegu nicimeraga na gicunj kia 70-80% gwa kahinda ka matuku 10. Mbegu ciagiriirwo nikunganio iri mitiini niguo citikario ni tutambi. Mbegu nocikare gwa kahinda ka mwaka umwe cingiikara ciri nyumu na citakuhutania na tutambi ukihuthira muhu.

Mawega:

- Nimwega na njuki, ngu, mbau na dawa(niuhuthikaga kuhonia ruo rwa nda na malaria), kugitira tiiri ndugakuo ni maai(miri yagui niinyitagirira tiiri wega)
- Kiruru, guthondeka tiiri na mahuti kuhuthika kuhumbira tiiri mugunda-ini.
- Guthakaria.
- Niuhandagwo mihaka-ini o hamwe na kurinda marigu

c. *Olea africana* (African wild olive, Kikuyu: Mutamaiyu, Kimeru: Muthata)

Muti uyu wonekaga kundu kuingi, na muno ruui-ini. Muti uyu niwiritragia riuu.

Mbegu citari njikaru muno no cihandwo orio na ciaikara muno nicibataraga kurutwo ngothi ya iguru niguo cimere wega. Iga mbegu handu haniaru kwa miaka miingi.

Mahuthiro:

- Irio: niurutaga maguta makuria ona ma kwihaka. Irio cia ng'ombe: ohamamwe na maguta ma ngri, guthondeka mbau, makara na mukinyi wa guthambia magego na ciuma.
- Niwiritragia riuu inene na kwa uguo nimwega hari gucokereria miti thutha wa kimera kia riuu.
- Niuthakaragia mugunda

d. Waterberry (*Syzygium guineense*, Kikuyu: Mukoe, Kimeru: Muriru)

Muti uyu wonekaga mititu-ini iria yuikaine ta lowland rain forest na mountain rain forests. Ikuraga kudu kugunyuna ringi maai-ini na njuui-ini. Mbegu ciaguo citibataraga guthondekwo niguo cihandwo tondu nicimeraga wega na nanjira nene ya gicunji kia 80-90% thutha wa matuku 20-50. No uhande tumikebe-ini. Matunda maguo matikaraga muno matathukite na kwa uguo magiriirwo nikunganio matanaikara muno. Nouinainie muti niguo matunda mague. Thutha wa kungania matunda magiriirwo ni kuhandwo o rio niguo matigathuke maniara.

Akorwo uguo gutingihoteteka, matunda nomaigwo gwa kahinda kanini handu hagunyu hari na mura kundu kuri na riers riiganu.

Mahuthiro:

- Nimwega na njuki
- Mbau
- Ngu
- Kiruru
- Dawa

Muti uyu noukorwo na makoni mari na thumu ungiuraga mundu kwa uguo aria na andu aria maui wega mbere ya kuhuthira ta dawa.



Plastics – njira ya guikara nacio tutaguthukia riera.

Mwandiki Eunice Wambui

Roar haria uikarite, kana ni kurugama kana niguikara thi uikarite kana guthii na-njira, urona kii? Kuihuire maratathi. Handu o hothe hari na maratathi ma plastic.

Maratathi ma plastic nimathukitie kundu kuingi muno. Maratathi ma plastic 100 million nimarutagwo ni ma supermarkets Kenya o mwaka! Mahingoga njira ya sewage na magathukia tiiiri hmwe na kurag thamaki na nyamu ingi. Nomorage mahiu riria ciamaria na kanua. Maratathi amngi matikoragwo mari maritu muno na nimatuikangaga muno na maingira tiiri-ini makagiria maai kuingira tiiri-ini. Uhoru ucio niutumaga mimera ndigakure na njira iria yagiriire na magatuma kugie na rwagi ruria rurehaga malaria an mirimu ingi iria yumaga maai-ini.

Ithui thiini wa TIST nituramenyerera maria maturigiciirie na njira nyingi thengia kuhanda miti. Turi na uigiririki wa kugia na utheru na kuhinyiriria

aria turiganitie maikare ta ithui.

Niturabatara kunina maratathi maya niguu mitiini na ithaka ciitu cikorwo ciri theru, ciana na mahiu maiti cikoro ciri ngitire nacigie na ugima mwega wa mwiri citari na mirimu.

Arimi amwe a TIST nimahuthagira njira ya "4 – Rs" niguu kuhurana na maratathi maya.

Re-user: kuhuthira maratathi maya ringi ithenya ria gwitikira kuheo mandi kuma duka-ini.

Re-cycle: handu ha gute maratathi maya no umahuthire kuhandira miti.

Reduce: kunina ugwati wamo na kumathika mothe tiiri-ini.

Refuse: kurega kuheo maratathi duka-ini.

Ithuothe nitunyitane tunyihie uhuthiri wa maratathi ma plastics.

Nituninemitu ya mibau kuria kwaraga muno na kuria njuui ciumaga.

Mwaniki: Joseph Gituma.

Arimi a TIST kuma Igembe nimarahinyiriria amemba na aria mariganitie kwambiriria kugitira na gucokereria njuui na kuria ciumaga. Na ona kuri uguo, nituramoria matikahande miti ya mibau kundu kuu. Ntwonete njuui ikihua kuria miti ino ya mibau

ihanditwo.

Handa miti miingi ya – kinduire ruui-ini niguu kugie na riera riega..

Tunyitane, tugitire na tucokererie njuui ciitu.



Arimi a TIST kwamukira iheo niundu wa kugitira njuui na kuhanda miti ya ki-nduire njuui-ini.

Mwandiki Jeniffer Kithure

Kuri arimi a TIST,

Miaka miingi thutha, njuui ciari nene na tutiatemaga miti na kurima hakuhi na cio na kuria kugunyu..umuthi turona njuui nyingi cikihua niundu wa maundu macio.

TIST niithondekete mitaratara miega ya kugitira njuui na kuhanda miti ya ki-nduire kuria kwaraga na njuui-ini. Marihi maya mangi, ikundi 5 nicikwamukira iheo niundu wa kuhanda miti ino njuui-ini.

Ikundi ici ni:

1. Kajoroje group, 2008KE332 thiini wa Kianjagi cluster.
2. Kabari Musingi conservation group, 2008KE670 thiini wa Ngariamama cluster.
3. Mwirutiri group, 2008KE2015 thiini wa Muthambi cluster.
4. Kerere women A group, 2008KE1191 thiini wa Njukiini cluster.
5. Ethni junior Group, 2010KE10 thiini wa Murungai cluster

Eustace Njeru ni mumemba wa Kanjoroje, kimwe kia ikundi ici. Ahandire miti 241 ya TIST na miti 201 yayo ni ya ki-nduire. Niahandite Muuru, Meru Oak, Mutunja, *Brachystegiana* Mukwega, *Brideria Taitensis*. Niekuhuthira miti ini na kuriithia njuki o hamwe na kuhurura ngu. Miti ini niiragitira ruui rwa Mara. We na amemba anga nimetikirikite hari PES thiini wa marihi maya mokite. Arauga akuhuthira mbeba icio na kwaramia tuta na kwongerera mit. Njeru arera amemba othe e TIST Kenya, "nitunyitane tagirithie njuui na maria maturigiciirie na kuhanda miti ya ki-nduire."

A memba anga a miena ino yaraga nimarauga mari na wendi wa kugitira na gucokereria tiiri na niguu matuikie kionereria kuri arimi anga. Nimarahanda miti ya ki-nduire, mirangi na nyeki niguu kugitira njuui. Maraugo maigirire TIST kwendia carbon, kuhanda mit na kwagirithia maria maturigiciirie. Nimareterera kwona marihi manene kumana na kuhanda miti ya ki-nduire na PES,

namwega mangi maingi o na aria anga makwamukira. Nimaroria o mundu uria uri hakuhi na ruui anyitane na aria anga kugitira njuui niguu tunyihanyihie mirimu.

Arimi aya nimoete makinya kugitira ihumo cia maai niguu citigathukio, kugitira maria maturigiciirie. Miti na mahuti maya niikagira kiruru na riria thi iri na kiruru miri ya miti ni ikuraga wega, na tiiri ukaiga ugunyu muingi. Uu nikuga ati miti iria iiguanaga na maai niiteithagiriria kwongerera maai tiiri-ini na kwagirithia tiiri. Maai nimakwongerereka kuri andu na nyamu.

Arimiaitu, nitwiharirie kugitira njuui na ithima. Angikorwo tutihariirie kugitira njuui, ugwati wa kwaga maai niukwoneka. Kuria kuumu guguthii na-mbere na kuma na tiitri gut unoru waguu. Andu aingi nimaguthii kundu kuraihu gwetha maai, reke tuteithie ciana ciitu, niguu cikorwo na tiiri munoru, maai matheru na nicii miega cigukenera.

Inginyita itemi atia?

Miti iria miega ya ki-nduire ya kuria kwaraga.

1. Ndukarime 30m hakuhi na ruui.
2. Ndukahande mibau 100m kuma kuri ruui.
3. Ndugateme miti ya ki-nduire
4. Makiria ma gicunji kia 30% kia miti gikorwo kiri miti ya ki-nduire.
5. Handa miti iria miega na ruui 30m kuuma ruui-ini
6. Tagania miti na 2m.

Angikorwo niukinyaniirie ikiro ici na niurenda kunyita itemi ta murimi wa kuria kwaraga, aria na murugamiriri waku wa cluster, mutari wa miti kana Jeniffer kuhitukira 0726319539. Miti yaaku yatarwo, nowamukire PES na ukorwo uri kionereria kuri arimi Kenya.

Mazingira Bora



TIST

The International Small Group & Tree Planting Program
www.tist.org

Kikamba Version

An Environmental, Sustainable
Development and Community Forestry
Program.



Antubochio TIST Cluster members during their monthly cluster meeting.

Picture by William Mugambi

Inside:

Kwa ndaia ya mututia professor wangari mathai, vanda miti 71 thini wa muunda waku mbua ino. Pg. 2

Kwiana kwa muvango wa TIST: Iyumbanie kwa Kuvitukithw'a kwa kikundi/ngwatanio Yenyu Kwiyoungamia. (Audit to qualify your cluster for Self Governance) Pg. 2

Kumanya na kuelewa Kutethw'a utethye (H2H), Uimi wa kusuvia (CF) Alameyumitye thini wa Mbua ino (ivanda yii). Pg. 3

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Plastics (mivila/manila) - nzia sya kutumia na kusuvia kwananga mawithyululuko. Pg. 5

Misanduku/mikuvulya ivandwe vaasa na nguumo sya mbusi, syandani na kula kiw'u kyumaa. Pg. 5

Aimi ma tist kunengwa uthuthio wa mbee nundu wa usuvia mbusi kwa kuvanda miti ila ya kiene. Pg. 6



Kwa ndaia ya mututia professor wangari mathai, vanda miti 71 thini wa muunda waku mbua ino.



Ithi nthini wa TIST nitukwatanite na nthi yonthe kumeta nundu wa kikw'u kya mututia Prof. Wangari Mathai ula unai musuvii munene wa mawithyululuko. Niwambiie kikundi/ngwatanio ya Green Belt Movement mwaka wa 1977 na eethiwa e

musesei munene wa mauthui ma nthi kwa kwikalya wailu, wiananu na sila wa katgi. Ene TIST nituna kwatanganite na Prof. Wangari syikaloni mbingi kumatha nzia ila tutonya useuvya na kwailya mawithyululuko na kuvikiia kieleelo kitu kya kwailya wikalo na mathayu maitu.

Ni uthatu kwitu kwithiwa Prof. Mathai anatutiie. Nitukuendee na kuthukuma wia museo wa kusuvia na kwailya mawithyululuko otondu unai wendi wake. Nthini wa mbua ino we muimi wa TIST vatonyeka vanda miti miongo muonza na umwe (71) kulilikana myaka ya mututia Prof. Mathai ula una tutiie ena ukuu wa myaka 71, ngelekany'o ni kana ethiwa wii vangite uvanda

miti 100 vanda miti 171, ethiwa kila muimi wa Kenya nukwitikilana na undu uu nitukwathiwa na miti myeu mbee wa 3.5 million mivande, Mititu miseo / mbumbe kwa thayu museo.

Lilikana kana Prof. Mathai anai ngumbau ya miti ya kiene, nu naasyaa kana yila ukutana nuvanda muti na kwoou osaa muti wa kinandi witawa "Nandi Flame" nikwathiwa muti uyu wi ilaa iseo yithiawa yi ituni ta ulilinsi wa mwaki. Kwa ndaia tata na vinya uvande miti ya kiene mbua ino.

Tukatumbithya masyitwa ma aimi na miti ila aimi ma TIST mevanda nundu wa ndaia ya Mututia Prof. Mathai. Ethiwa nukwenda isyitwa yaku yitumbithw'e thini wa "Roll of Honour for Professor Wangari Mathai", tuma utumani mukuvi (SMS) wina isyitwa yaku, isyitwa ya kikundi/ngwatanio yaku, na miti ila uvandie kwa 0718790007(SMS only) kwa ndaia ethiwa nukutuma tuma mbee wa matuku 15/11/2011 matemavituku. Utumani uu ukatumbithw'a nthini wa Issue ya December 2011 ya *Mazingira Bora Newsletter*.

Kwiana kwa muvango wa TIST: Iyumbanie kwa Kuvitukithw'a kwa kikundi/ngwatanio Yenyu Kwiyoungamia. (Audit to qualify your cluster for Self Governance)

Omituki ikundi sya TIST nikukunikilwa na kwikiwa kithimini kusyiw'a kana iendee na kwona kana nindumu undu itonya kwiyoungamia. Ikundi / ngwatanio itonya kwiyoungamia nisyo kieleelo kya TIST kuma tene na nikitumaa utumiku wa mbesa withiwa wi munini na kunenge aimi vaita munene. Ikundi ila ikavitukithw'a ikakwata motethyo maingi na makanengwa kwiyoungamia mo ene. Nthini wa ivinda ya kuvitukithwa kikundi kikeethiwa kiikunikilwa undu kitonya kwiyoungamia na ulumu wakyo kula kwi ene (mamba). Kikundi/ngwatanio numu yaile kwithiwa na

- Tukundi 30 - 50 na aimi katikati wa (300-400)
- Kiendeeasya utongoi wa kithyululu na utongoi wina unyuvani wa w'o na wina kyeni ula wikawa kila myai ina (4 months)
- Kikundi kikomanaa kila mwai na mombanaa vamwe na tukundi tunini.
- Kikundi kina kitheka kinene kitonya uvandwa miti ta 200,000 na kina tukundi tunini tukuvanda na kumisuvia miti isu.
- Mena ene/mamba mathukumaa vamwe na avitukithya/athiani "Quantifiers" na kusyaaisya kwona usyao wa tukundi tunini kila mwaka.

- Ni mamanyiite tukundi tunini iulu wa TIST na kuvanda miti na undu wa ndunyu ya uta nzeve itavisaa/nthuku "Carbon market"
- Ni mekaa masavu moo nesa na kutunga livoti kila mwai.
- Nimatumaa kila maneenea kila mwai
- Nimamanyiasya ene angi eu (new members recruitment)

Kwongeleela, Kikundi kwiyoungamia nonginya kithiwe kitonya kuikiithya kana:-

1. Tukundi tunini nituvitukithye kwa nzia ya w'o na ya kyeni
2. Tukundi tunini nitwakwata ndivi yatwo kwa ivinda yila yaile na kwa nzia ya kyeni
3. Kila kakundi nikakonaa kila kyumwa na nimaumanyiasya utongoi.
4. Kila kakundi ni kakwata *Mazingira Bora Newsletter* kila mwai
5. Tukundi nitwakwata umanyisyo na twatata kwika twitwoka kwa ngoo ya kwenda, kumanyiany'a nzia sya uimi wa kusuvia, kusuvia mwaki/ngu, kusuvia muthanga na nzia syaa kusuvia muthanga kukuwa na maundu angi maingi.



Kumanya na kuelewa Kutethw’a utethye (H2H), Uimi wa kusuvia (CF) Alameyumitye thini wa Mbua ino (ivanda yii).

Muvango wa TIST wa Kutethw’a utethye (Helped to help(H2H)) waseuviw’e kwikia aimi vinya nikana matate maundu meu maseo, na itina wa kwaila kwa kutata, nitwa mbiie kuvundianiy’a vaita uu museo mutui kwa ungi ala ni ma TIST. Muvango uu ni kwa mundu umwe kumanyiw’a na usu kumanyisya angi na kumya umanyi munduni umwe kuthi kwi angi.

Nthini wa muvango uu wa kutethw’a utethye ene aingi ma TIST nimathuthanise na maendeesya nzia nzeo sya kunyivya utumiku wa mbesa kutongosya na kwika utalo mwailu, waw’o na wa kyeni. Nzia ino nitetheesye ona aimi ma TIST kwithiwa maitethania kwa kila masomete na kwona kikyailu nthini wa uimi wa kusuvia na maiko ma usuvia ngu/mwaki myaini mivuthu mivituku.

Na uu niw’o walany’o uu ithukumaa.

Kwa muvango wa H2H na CF, ambiliilya nimaseuvasya miundu na kwisa maima mainyiva ta 750 ma CF, kwa kuvanda CF nukwataa mbemba sya katumani sya kuvanda. Kwa kwithyua namo mayathana kuatiia nzia nzeo sya uimi na kuvundisya ala angi mekwenda kutata na kutunga livoti nzeo ya ngetha.

Ethiwa kuima kwa kusuvia (CF) nikwaila, nimatumiaa moseo asu kwailya na kuvitikithya mbeu kwa aimi angi atatu (3) kuma kikundini kyoo kya TIST. Ila aya atatu makwata muthinzio uyu kuma kwa ambiliilya nimevitaa onamo kwika uu. Kwuka undu uu wa kutethw’a utethye (H2H) nikwithiawa

kwi kwa w’o mwianu kwa ene maTIST SG na nthi yothe. Mwambiliilya umwe niwikiaa musingi kwa andu angi aingi ma ngwatanio kuendee na kwithiwa na usyao mwailu.

Ala meyumitye mbua ino

Isyitwa ya kikundi **Isavu/namba ya ala meuthukuma**

Mutuati/Kangeta	54
Kariu MCK	105
Nkondi	16
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Antubochiu	4
Kinoro	15
Rwanyange	3
Githongo	4
Ikumbo	4
Limoro	1
Nkando	4
Ruiru	6
Ntumburi	16
Mworoga	2
Igwanjau	5
Nthangathi	2
Kiburine	1
Irindiro	4
Kamaroo	4
Kirindine	4
Nchiru	3

Ivinda ya kuvanda: Miti miseo ya kiene/kiyenyeji ya kuvanda.

Miti ya kikamba/kiene ni miti ila ya kiafrika na yialwe/yianiwe/itaniaa mawithyululuko ala imeaa. Miti ino niseuvasya muthanga, ikaete tusuni na tusamu. Miti nimeaa nesa kundu kwi kivathukanio.

Nthini wa ngwatanio na mbumbano sya TIST aimi nimonanisya mithemba ya miti ya kiene ila yikaa nesa na ninthini wa kisio kiilye atakila yikaa nesa. Mithemba imwe ya miti isu niwetetwe vaa nthi, twitunga muvea kwa “World Agroforestry Centre” nundi wa uvoo iulu wa moseo, mbeu na kuseuvya mbeu isu kwa kuete wailu ula waile. Wikulw’a utate imwe ya miti ino nthini wa uvandi ula uendee na uyieka/uimatavya angi mamanye iulu wa mithemba ila yi kisioni kyaku ila yikaa nesa.

1. Prunus africana (Kikyuyu: Muiri, Kimeru: Mweria)

Muthemba uyu wa muti kaingi niwithiawa munamuno thini wa mititu. Mbeu sya w’o ni syithiawa mitituni ivinda ya sua. Kolany’a ngii ila syina langi wa muthanga mutune mutuku (dark brown), kana matunda meu kuma mitini iulu kana ila ivalukite nthi.

Umya ulia kwa kuinda vandu va masaa 24 na uithambya iulu wa kisungu kya waya. Anika muuyini vandu vena nzeve kwa masaa ana. Ndukaie mbeu vanda. Kulinga ngii na matu nikwiaa kimeu kwa ivinda inini yila ukutwaa kuvanda vandu vangi. Vanda kiviuni kana mikeveni, kumea ikuaa kati wa sumwa 6 - 8.

**Utumii**

- **Pest repellent** (nilungasya tusamu tula twanangaa) ta iinyu (aphids) ila syanangaa liu kwa muike waw'o. Malaa nimethiawa na ukungu na uki kwa nzuki kukua na kutumia kuseuvya uki, niwumaa ngu nzeo.
- **Medicini** (ni muiito) Kiw'u kyavivwa kuma makondeni ma muti uyu nikitumiawa kuiita mee memanene. Matu nimatumiawa kwa kunyungia mundu ena ikua kana e mumile kuete wendi wa liu. Kiw'u kyongeleelwa nthini wa ikonde ithie nikietae kiw'u kitune kitumiawa kuiita ivu, na kuiita ona indo.
- **Erosion control** (Kusiia muthanga kukuwa). Miti ino noivandwe thini wa itheeo kusiia muthanga kukuwa nikiw'u kana ikavandwa mitauni iatiane ta laini na isiia nzeve. Matu ma miti ino nimanoasya muthanga.
- **Ornamental** (Kwanakavya) Yavandwa muundani niyanakavasya.

2. Peacock Flower (Albizia Gummifera, Kikuyu: Kukurwe)

Muti uyu kaingi niumeaa ithekani sya mbua, kana uiini na kundu kula kutekunikite. Ngii nzau ndyendaa kuiitwa mbeu ya kwia niyikiawa kiw'uni kimuutia naiyiekwa iithitha. Ngii noitilwe muthya kukatiia kumea. Ngii sya w'o nimeaa na mithenya ikumi na mbingi iileaa umea kwoou withiaa nota 70 - 80% ila meu. Mbeu niyaile ukolanw'a yiomutini itanambia kwanangika. Mbeu yaw'o nitonya kw'iwa vandu va mwaka muima yikiitwe muu.

Utumiku

Ngu, Kuithya Nzuki, kwatuwa Mbawu, kuseuvya nguluu, kuiita ithuma, na ni muiito/ndawa (mikea ya ngii yathiwa nitumiawa kuiita ivu na ikonde kuiita ndetema), kusiia muthanga kukuwa, mii yaw'o nilumasya muthanga.

Muunyi, kunosya muthanga, yila matu metika nthi nimavulanaa na muthanga na nundu ve muunyi matu mayoa mainosya muthanga.

Wanake, nivandawa town kwanakavya mawithyululuko.

Kuvandwa mivakani, matu nimakalaataa kiw'wa kwa maiu.

3. Olea africana (African wild olive, Kikuyu: Mutamaiyu, Kimeru: Muthata)

Muti uyu niwithiawa nthini wa isio mbingi syi kivathukany'o ta vakuvi na kiw'u, mikaoni/tulusini, syandani, nguumoni sya mbusi na ingi nthi nyumu. Nimuti wumiiasya syua na mbevo.

Ngii nzau nitumiawa kuvanda na ngii nguu nisiindawa kiw'uni kithithu vandu va masaa 48. mbee wa kuvandwa nisyatuawa kuikatiia kumea.

Utumiku

Liu: Usyao wayo ni mauta (olive oil) nanimatumiawa ta liu. Ingi matumaw'o nanimatumiawa ta liu wa indo. Ni miti itumikaa ta ngu, makaa, mbwau, muswaki na wanake.

Nundu ni muti wumiiasya syua kwoou no utumike kutwikithya mititu kundu kula kumu nthini wa Africa

Nimuti wanakavasya itheka.

4. Waterberry (Syzygium guineense, Kikuyu: Mukoe, Kimeru: Muriru)

Kaingi muti uyu numeaa ithekani kula kwi mititu ona ivinda yingi kiw'uni na nundu wa uu kaingi umeaa nguumoni sya mbusi, mikaoni kana tulusini.

Mbindi syayo iyendaa kuuitwa mbee wa kuvandwa, na imeaa syonthe kaingi 80-90%. Kuvandwa mikeveni kaingi nikwailaa nundu ileaa umea syavandwa. Matunda nimoaa mituki kwoou nimaile ukolanw'a mavaluka oou kuma mutini. Mundu no athingithye muti nikana mavaluke akolany'e. Itina wa kukolany'a nimavandawa vate kweteely'a nundu mooma nimekwasya vinya wa umea. Kethiwa vaitonyeka mbeu niyiawa thini wa makavo ma musumeno kana mikeveni mikunue.

- Utumiku
- Kuithya nzuki
- Kwatua mbwau
- Ngu
- Muunyi
- Ndawa/muiito .

Manya/ukany'o: Makavo maw'o nimaetae kikiw'u kwa mundu kwoou uiutumia ta muiito/ndawa nonginya wonwe undu utumiawa nala maautumia.



Plastics (mivila/manila) - nzia sya kutumia na kusuvia kwananga mawithyululuko.

mwandiki ni Eunice Wambui

Syisya kithyululu kithiwqa niuungye kana nuilye nthi kana niundete. Wiona kyau?

Kwina kiko kila vanndu na kila kingi ni ivumbu sya plastic (mivila).

Mivuko ya plastic nitwikaa kithina isioni mbingi na kwithiwa yita nthina wa mai me vandu vataile. 100millionm sya plkastik ninenganawe kila mwaka thini wa Kenya ni nduka sya kwisakuia (supermarket) syisyoka. Nivingaa nzia sya kiw'u kithuku, ikamiia muthanga, ikaumisya makuyu na nyamu one ingi nimooa indo syamaya ta uithyo. Mathangu maingi ni mavuthu muno na matwikaa na ikua yimwe na tulungu tumwe tuvulanaa na muthanga na maisiia kiw'u kilika muthangani. Vala vate kiw'u nayo miti nditonya kwika nesa nakiw'u kyatumana kiiseuvya vandu umuu otonya usyaia na mowau anga ala maetawe ni kiw'u.

Ithyi nthini wa TIST twina muio wa kusuvia mawithyululuko na kuthesya ona tuivanda miti. Twina wia wa kuthesya, kusuvia, kwanakavya na kuthangaania kuseuvya mawithyululuko. Nitwailwe

ni uvetanga mathangu vakuvi na ivuio na ikeethiwa syi nzeo sya kwendeesya, syana na indo ikeethiwa syina usuvio na uima nthini wa mawithyululuko matheu matena uwau. Aimi amwe nthini wa TIST nimatumiaa "4-Rs" kuweta thina wa plastic.

Re-use (Kutumia ingi) kuendaa ndunyu na mathangu makuu vandu va kwosa anga meu.

Re-cycle: (kumatumia kwa nzia ingi) vandu va kwikya namayooa kava ukamaseuvya ta mikeve ya kivuio, kana ukaseuvya ikanda ya kutumia kuma mathanguni asu.

Reduce: (Manyivye) Kumombanya vamwe na kumathika yiimani yimwe.

Refuse: (Malee) Ethwa nutonya malee ila ukuaa syindu kava ukue kikavu.

Tuthukumei Vamwe tuole uthuku wa plastic.

Misanduku/mikuvulya ivandwe vaasa na nguumo sya mbusi, syandani na kula kiw'u kyumaa.

Mwandiki ni Joseph Gituma

Ithyi aimi ma TIST ma Igembe nitukwenda uthuthia amemba na atui maitu masuvie mbusi na wumo wasyo . Naingi nituendee na kuvata andu kuvanda miti ya misanduku/mikuvulya mbusini na nguumoni. Nitwambiie ukwatwa ni mathina ma

kiw'u kunyiva kula misanduku mivande. Vanda miti ya kiene nziani sya kiw'u kusuvia na kuete wongeleku wa kiw'u na kuseuvya nzeve. Vamwe nituusuvia na kusiia mbusi situ.



Aimi ma tist kunengwa uthuthio wa mbee nundu wa usuvia mbusi kwa kuvanda miti ila ya kiene.

Kwa muimi wa TIST

by jeniffer kithure

Vau tene muno, mbusyi syeethiawa syi numu na tuyatema miti nguumoni kana kuima kw’o ona kana kula kwina isoo/syanda. Umuthi nitukwona mbusi mbingi iyuma nundu wa mikalile mithuku.

TIST niseuvitye nzia nzau sya kusuvia mbusi kwa kuvanda miti ya kiene ndeeni sya mbusi na nguumoni sya mbusi. Kwa ndivi ya miti ila yukite tukundi tutano tunini tukakwata mbesa sya uthuthio nundu wa uvandi woo wa miti ya kiene itena uthui/yiia ungu nguumoni na utee wa mbusi.

Tukundi tuu ni:-

1. Kajoroge group, 2008KE332 nthini wa kikundi kya Kianjagi cluster
2. Kabari Musingi Coservation group, 2008KE670 nthini wa Ngariama cluster
3. Mwirutiri group, 2008KE2015 nthini wa Muthambi cluster
4. Kerere women A group, 2008KE1191 nhini wa Njukiini cluster
5. Ethii Junior Group, 2010KE10 nthini wa Kikundi kya Murungai cluster

Eustace Njeru ni umwe wa kikundi kya Murungai cluster, kimwe kati wa ikundi ila nzeo kwa uvandi wa miti nguumoni sya mbusi. Niwavandie miti 241 ya TIST na miti 201 kati wayo ni miti ya kiene. Nuvandite miti ta muuru, meru oak, mutuja, Brachystegia and mukwega, Bridelia taitensis. Niekutumia miti ino kwa kuithya nzuki na kuseuvya uki na akanzea ngava na kutumia ta ngu. Miti ino yu niiendee kwikia muunyi nguumo sya usi wa Mara. We na kikundi kyake nimavitukithitwe kunewa PES ingenganeni yila yukite. Niwaitye kana akatumie mbesa isu kuseuvya na kunenevya kivuio nikana mavande miti ingi mingi ya TIST. Neru nukukulya aimi oothe ma TIST ma Kenya “Tuthukumei vamwe kuendee na useuvya na kwailya mbusi situ na mawithyululuko kwa kuvanda miti ya kiene.

Ene angi ma ikundi ithi sya uvanda utee wa mbusi nimeasya kana menavata na mea ma kusuvia na kwailya mbusi kuola kikuwa kwa muthanga na kwithiwa me ngelekany’o na ukusi kwa ene ala angi undu wa uimi museo. Nimavandite miti ya kiene ta bamboos nyeki kwailya ndee sya mbusi. Miasya malikanile na TIST nikana makune viasala wa kuta nzeve itavisaa/nthuku (Carbon Credits), kuvanda miti mingi, kuthukuma vamwe kuseuvya mawithyululuko. Nimasyaaisye na kweteela ukwati uyu ungi wumanite na kuvanda miti ya kiene (PES, Payment for Environmental Services) na ingi vaita

mbingi ila mataniaa nundu wa kusuvia wumo wa mbusi na mawithyululuko. Nimeukulya kila mudi wikalaa vakuvi na usi kuthukuma vamwe nikana tusuvie na tuyithiwa na kiw’u kiseo kitena mauwau.

Aimi aya nimosete itambya ya vata muno kusuvia wumo wa kiw’u nikana iikathukw’e na kusuvia mawithyululuko. Miti na ikuthu niwika muthanga na kuuthithya, na mii kukwatania muthanga ndukakuwe nikiw’u kana kiseve, ingi mii ya miti nitumaa muthanga withiwa na nzeve na kutuma kimeu kikala muno muthangani kwa ivinda iasa. Kii kionania kana miti ya kiene niyithiwa yi munyanyae wa kiw’u, muthanga na mawithyululuko na niseuvasya muthnaga na kiw’u kila kitumiwa ni andu, indo na nyamu.

Anyanyae maitu aimi, twiyumbanie kusuvia mbusi tulusi na ndovoi. Ethiiwa tui kuikiithya usuvio wasyo twi muisyoni munene wa kwithiwa tutena kiw’u kiseo tutumia. Isio mbingi ila itethiwa na mbua mbianu na mangalata nitonya utwika weu, ona isio ila nou na nzeo nikwithiwa muisyoni wa kutwika mang’alata. Na uu weethiwa andu aingi nimeukosa mawikalo na kuyithiwa na thina mwingi. Twithiwa na tei kwa syana situ esukue maitu na syawa ila syukite nikana meithia utiwa wa muthanga munou wina kiw’u na mawithyululuko maseo ma utania.

Ndonya kwithiwa umwe ata?

Nguumo nzeo mbande miti ya kiene.

1. Vai kuima matambya 30 kuma usini
2. Vai misanduku/mikuvulya matambya 100 mitini ila ivanditwe kuma usini.
3. Ndukateme kana kuvyeka uthui na kila kimeete ungu/kila kiwukite muthanga.
4. Kilungu kinene kwi 30 iulu wa 100 (30%) kya miti ila mivande nguumoni kyaile ithiwa ki kya miti ya kiene.
5. Vanda miti ila ni munyanyae wa kiw’u na nyeki matambyani 30 kuma usini.
6. Utaaniu wa miti wa matambya eli kuthi na mbee niw’o waile.

Kethiwa nuvikiite maundu aya thathatu maneenewe vaa iulu na nukwenda withiwe umwe wa ala meunengwa uthuthio wa kusuvia (PES) ta muimi wa kusuvia mbusi na miti ya kiene neena na munene wa kikundi kyenya kana uneene na Jeniffer - 0726319539. Kikundi kyenya kyeethiwa kyaile nimukunengwa uthuthio uyu wa PES na kwithiwa mwi ukusi/ngelekany’o nthini wa Kenya yonthe.

Mazingira Bora



TIST

The International Small Group & Tree Planting Program
www.tist.org

Kipsigis Version

An Environmental, Sustainable
Development and Community Forestry
Program.



Antubochio TIST Cluster members during their monthly cluster meeting.

Picture by William Mugambi

Inside:

En konyitetab Prof. Wangari Maathai, I min ketik che sire 71 en imbarengung en kasari bo robta. Pg. 2

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En konyitetab Professor Wangari Maathai, I min ketik che sire 71 en imbarengung en kasari bo robta.



Echek en TIST kebendi kibagenge ak bikab ngwony en rirekab meetab neo ne bo ribsetab timwek, Professor Wangari Maathai. Kiinam kurupitab Greenbelt Movement en 1977 ak koek chito ne o ne kiborjigei banganet ne mie nebo

ribset ne mie nebo tugukab emet, en badaab tai, en pcheet agenge ak imanda. Membaekab TIST ak banganenyin ko kisich oroindo kotuiyo ak Prof. Wangari Maathai en tuiyosiek che chang ole kikingalal agobo oratinwek che chang che kinyorundoi pcheet agenge nebo kigimit bikchok en ribsetab timwek ak sobet ne mie.

Aragenet ne o, kele kobagaaktech Prof Maathai. Kitesentai boisiet ne kararan nebo ribset ak banganet ne mie nebo timwek en tai.

En kasari bo minset, keguure chi age tugul ak temindetab TIST agetugul komin ketik che tesunot 71 en tegistaab sobetab prof Maathai, en tegisto ak kabwatet ne bo kenyisiek 71 che kisob Prof Maathai. Kou en kabarunet, ngot ko kigebangan imin ketik 100 en kasari ,imin 171. Ngot ko kigebwaat

imin 1000, I min 71 alak .Ngot temik tugul che bo TIST en Kenya koyaan kursoni ketegis Prof Maathai en orani kenyonu ketik cyhe lelach che sire millionisiek 3.5, timdo ne kararan en sobet ne kararan

Ibwaat ile, Prof Maathai kogi kandoindet ne kiborjigei minsetab ketikab gaa. Kimwa kole, “Yon amache aboiboen amine ketit. Ago achenge ketitab gaa ne kiguuren Nandi flame, tindoi mauandani kararan ne birir. Yon tindoi mauk kou yon kagilal maat .”

Kaigai yomten minsetab ketik che chang missing chebo gaa.

Kibendi kesire kainutikab temik ak kit ne ten ketik che kamin temikab TIST en tegistaab Professor. Ngot imache ketesten en **‘Tegisto ne o nebo Professor Wangari Maathai’**, kaigai iyogun sirutyet ne mingin (sms) ne bo kainengung ,kainetab klastaingung ak nambaitab ketik che kemin koba 0718790007 (sms kityok). Kaigai iyogun ni en anan komait tarigit 15/11/2011. Noni kebendi kesire en kasetitab Mazingira Bora nebo December 2012.

Etunetab banganetab TIST: Ochobogen en chigiletab klastaisiekwok si komuch kotelelchigei.

Konegit. Klastaisiekab TIST kechigili si kegeer tesetabtai en egunetab kastaisiek che imuch kotelelchigei. Klastaisiek che tononchingei kogeeretab TIST, ak ribetab tugul che kiboisien koba ngwony asi konyor kesutik che chang temik. Klastaisiek che sire chigilanito kosiche kelchinet ne o ak kotononchingei en let. Chigilanitok kotakchingei missing ngot ko kim klastait asi koboisienchi membaekyik. Klastait ne kim konyolu:

- Kotindoi kurupisiek che mengech 30-50 (temik 300-400)
- Koyaei kandoinatet ne zungukani ak kandoinatet ne bo kiboitinik-kobin lewenet en kila arawek angwan (4)
- Tuitos kila arawa ago tuiyet kotuitos kurupisiek che mnegech komie.
- Tinyei mbaret komin ketik 200,000 ak kotinyei kurupisiek che mengech che boisie missing en minset ak ribetak ketikwai.
- Nyolu kotiyei membaekab klasta che boisie ak Chigilik si kogeer kelchinetab kurupisiek che mengech kila kenyt.
- Nyolu konet kurupisiek tugul che mengech

missing agobo TIST, minsetab ketik ak aldaetab koristo.

- Koyai hesabu komie ak koyokto hesabuk tugul kial arawa.
- Koyokto records chebo kila tuiyet en arawa chebo klasta.
- Sire en kagiletabgei membaek che lelach chebo TIST.

Kestechi, klastait ne tononchingei konyolu ko;

1. Kurupisiek che mengech kotinyei imanit ne inet.
2. Kurupisiek che mengech kelibani ketikwak komie ak en betut ne yamat.
3. Tuitos kila kurupit ne mining en wikit age tugul ak koyaei kandoinatet nezungukani ak ko nebo kiboitinik.
4. Kurupit age tugul ne mining kosiche gazetitab Mazingira Bora en arawet agetugul.
5. Kurupisiek che mengech konyoru kanetisosiek ak ko konugei en koyai ak kopche banganutik che miach ko u Temet ne bo ribset, jikosiek che ribe maat, ribsetab ibetab ngungunyek ak alak



Kiguiyo ketoretin si iitoretisie (H2H) Temisietab ribetab ngungunyek. Temik che bo kasari bo minset.

Banganetab ketoretin si iitoretisie nebo TIST , ne kiguuren ‘H2H’, kokigibangani si kogimit temik koyomda oratinwek che lelach ye kaibata borotet, kopchei borotet ne bo banganet ne kigeyomta ak bikab TIST che bo kokwet. Banganetab TIST ko kotoret temindet agenge ,ak kotoret chichoton bik alak che chang koyob kogoitoetab borotet che kinyor en temik alak.

Koyob H2H, temikab TIST kogimiti pcheetab banganutik ch e lelach che kororon koitchi temik alak che chang kogaboisien rabinikab banganet che tuten ak tagunet ak geeret ne mi barak. Rabinik che kiboisien kobendi gwony ak kotestai kogimit banganet. Membakab TIST che mi H2H ko tesetai konyoru borotet en jikosiek che kororon ak tmisietab ribetab ngungunyek en arawek che tuten che mi tai.

Inoni ko ole boisioitoi:

En banganetab temisietab ribetab ngungunyek ne bo H2H ,kanaamik che kichop mbarenikwak , chekigobal keringonik che maregunen 750, che mine en ribsetab ngungunyek konyoru keswek che kigechigil che bo bandek cha mine. En weget, koyoni kosib banganutik che miach ,ak konet temik alak che bwonen ak kogoto logoiwek agobo minutik en imbarenywan. Ngot ko bor minutik komie, koboisien borotet ne kanyor en imbar kogoito keswek che kigichigil koitchi membaek somok alak chebo TIST en

klastainywan. Yon kanyor membaechu kogochinet koyob kanaamikab H2H, koyai kora kayonchinet ne u niginye. Keboisien banganetab H2H, k obo kamaanut missing en kurupoisiek che mengech ak en ngwony tugul. Kanaamindet agenge ,konaame kasibet ne o ne koi ne bo borotet ne o.

Temik che bo nguni.

Kainetab klasta	Nambaitab bik
Mutuati / Kangeta	54
Kawiri MCK	105
Nkondi	16
Mitheru	11
Kianyaga	6
Antubochiu	4
Kinoro	15
Rwanyange	3
Githongo	4
Ikumbo	4
Limoro	1
Nkando	4
Ruiru	6
Ntumburi	16
Mworoga	2
Igwanjau	5
Nthangathi	2
Kiburine	1
Irindiro	4
Kamaroo	4
Nchiru	3

Kasartab minset: Ketik che kororon chebo gaa.

Ketik che bo gaa ko ketik che kiiname en Africa ago kibityo en emet ne ki nyolchi. Imuch kotoldol ngungunyek ak oek korikab taritik ak kotoret tiongik che mengech. Ketik che terter korutu komie en emotinwek che terter.

Koyob kanetisiosiekab TIST ak tuiyosiekab klasta, temikab TIST kokikonai katikab gaa che chang che kororon ak che toreti en oldanywan alak en ketichu kokagiator en ngwony ,ak kiwekchini kongoi World Agroforestry Centre agobo logoiwechu che bo kamanut ak chengsetab ndenderek ak chobet en borotet. Gaigai ibwat alak en chu en kasartab minset ne nyone ak omuch omwawech alak che kororon en olon ngwong!

a. *Prunus africana* (Kikuyu: Muiiri, Kimeru :Mweria)

Keti bo gaa kenyorchin missing timwek che kigitaban. Ndenderek kenyoru en osnosiek en kasartab kemeut. Yum kityo ndenderek che kigotuegitun ,che kiruryo en ketit barak ana ko ngwony.

Cherun ne bo barak en kanuret en saisiek 24 ak ichuchugan. Ibaraa en boroindo ne gitigin en ole mi koristo, urwet ngwony asi koyomyo-ngandan en saisiek angwan kityo. Manyolu kegonor ndenderechu noton anyun boisien kota ko lelach. Ketugen sogek che tuonen ko toreti asi ko ma yomyo yon kiibe ak kegonori. Min en kabetit ana n ko en kibabok, kabisto ko en kasartaab wigisiek 6-8.



Boisienyin.

- ✓ **One kutik** .Much koon kutik che u Aphids,Nematodes (che ngeme minutik) koyob arufunyin.Mauwek kotinye beek che chang ak busiek che kororon en segemik.Konu kwenik che kororon.
 - ✓ **Kerichek** .Beek ceh kagicher en bertetab ketit keboisien en kanyaisetab etunetab prostate. Sogek keboisien kichut yon tindo chito maat anan kee si kogon shororto.Beek keteschin berik che kagetonaton ago beek ceh biriren keboisien en kanyaisetab moet,berik kemuche keboisien en baetab tuga.
 - ✓ **Teretab nyungunyek**:Ketichu kimuche kosub chororasion anan ko ole kibalak.Toreti koboos koristo.Tese toldolindaab ngungunyek.Sogek kimuche keboisien ketuchen ngungunyek anan kou keturek che nyalilen.
 - ✓ **Kororindo** : Chobe urwet ne kararan en imbar.
- b) Peacock flower (Albizia gummifera, Kikuyu : Mukurwe)**

Keti kenyoru missing en ole mi ngwony ak ole barak en osnosiek che roboni ak en ole yaatat ole rubegei ak osnosiek.Tenderek che lelach ko ma mache chobet age tugul.Tenderek che kigegonor komache kimur en beek che lolong ak kebagach kotkokaititegitun.Kimuche ketil kiten en keheber si o chokchi en rrutunet.Kabistaet ko kararan,70% - 80% em betusiek 10.Tenderek ko nyolu kekwei kotagomiten en ketit si koboos wechetab kutik.Tenderek kimuch kegonor en kasartab kenyt agenge yon kagigonor en ole ma mi beek, mamiten kutik koyob kandeetab orek.

Boisienyin.

- ✓ **Amitwogikab segemik,kwenik ,bagoinik , manget ak kerichek.** (Yon kagituatui korikab tenderek ke ee yon lole moet ak berik che kagiyo kotoreti en malaria), teretab ngungunyek (tigitik ko rate ngungunyek ak koter laetab ngungunyek)
- ✓ **Urwet ,kandeetab nitrogen,toreti kotoldo mgumgunyek,** naata ko ketit ne kararan en tugetab ngungunyek amun chang sogek che mi ngwony yon kalelekta.
- ✓ **Kororindo.** (kimine en barabara en townisiek amun en kororindonyin)
- ✓ **Pcheetab kiwato,**sogek kotoreti ndizinik korur en chokchinet.

c) Olea Africana (African wild olive, Kikuyu/ Mutamayu, Kimeru: Muthata, Kipsigis: Emitiot)

keti kenyorjin ole terterchin missing ole negitchin ak beek en tabandaab ainosiek ak en ole yataat.Magase robta ne o ana ko kemeut

Tenderek che lelach kogororon en minet.Tenderek che kibo keny kenuure en beek che kaitit en kasartab saisiek 48.Tenderek kesib kechobe keyatyat keboisien neut anan ksit ak koita.Niton ko amun yon kagicher nebo barak ne ui knyumnyume kabistoet.Kimuche kegonor tenderek en ko ole yamat en kenysisiek che ma chang

Boisienyin .

- ✓ **Amitwogik.**Boisietab keti agenge ko mwanik chik ak tenderek che kiame.Amitwogikab kiyagik:Chome kiyagik koaam keti.Kora keboisen kou kwenik ,bagoinik,makaa,sitetab kelek ak karorindo.
- ✓ **Wegunetab osnet.**Keti komuch keboisien en wektaetab timwek amun en kamuget ne imuch korut en ole ma o robta.
- ✓ **Kororindo** .Keti kotinyei kamuget keboisien kegararanit emet.

d) Water berry (Syzygium guineense, Kikuyu: Mukoe, Kimeru: Muriru)

Keti kenyoru en ole mi ngwony ,osnosiek che roboni ak tulonok che roboni che osnosiek.Rutu missing en ole mi kaitityet,kasrta age en beek,ak kenyoru en tabandab oinoisiek.

Ndenderek komamoche chobet agetugul,amun kabistaet ko karan ako en kibagenge.kinyoru agoi 80-90% che kisiche en kasartab betusiek 20 agoi 50.Nyolu keminchi kibabok amo en kabetisiek korok.Lokoek koweckokse noton anyun nyolu kekwai yon kaba ngwony.Kimuche kora kitumtum ketit ak kipsakat.Yon kakekwai konyolu kemin en chokinet amun imuche koweckok yon kaigage. Yon ma imugokse niton kimuche kegonor en kasarta ne nwach n murek che tuonen ak kiabok che yototin en ole mi koristo.

Boisienyin

- ✓ Amitwogikab segemik ✓ Bakoinik
- ✓ Kwenik ✓ Urwet
- ✓ Kerichek

Ibwat; berik che tinye sumu komuche koib meet en biik,noton anyun nyolu keib ribetabge yon kiboisien koik kerichek,koboisien biik che tinye naet



Plastik: ole kimuche keboisioto ak keter ama ngem timwek.

Kasire: Eunice Wambui

Ker ole imi. Angot ibure, itononi anan iwendi, nee ne ikere? Ikere tuguk che chang. Nekit olon tugul, ko kanyi saratikab plastik.

Bebabak che bo plastic ko kongem ole o ak kowech emet. Bebabak millionisiek 100 kikoito kila keyit en tugosiek che echen en Kenya. Time ole ireito beek che yachen, weche ngungunyek, weche njirenik ak tiongik, ak imuche kobar kiyagik yon kaam plastik che kagilagta. Che chang en bebabak ko terter ak ko wechokseyon kokiboisien konyil agenge, ak ingole ge ak ngungunyekak koter beek komachut ngwony yon karobon. Niton ko ngeme ketik ak koik boroinde ne kararan ne menye mbu che ireu malaria ak mianwogik alak che bo beek.

Echek en TIST ketinye boroinde kerib emet en oratinwek che chang kotabal minsetab ketik. Kitinye kasit kerib emenyon ko tililit; koribok ak ko mieit ak kikimit biikab kokwenyon kosib niton.

Nyolu keiten plastik si kobit kobwa ketik ko mie ak ko kararanit, si konyor lagokyok ak

kiyagikyok mieindo, kemeny en ole tilil ak komami mianwogik.

Temik alak en TIST koboisien '4-R' en istoetab plastic.

Re-use-boisien kora –kimuche keboisien kora bebabak nekata kikonech alak che lelach.

Re-cycle-boisien en kasit age-Negata iwirtoi plastik che mo chorotos imuch iboisien en boisiet age neu kemich ketik en nasaret. Imuch kora inaben rokoet anan boisiet age. Niton ko keboisien rabinik che mi ngwony ak inyoru borotet ne mi barak.

Reduce-boos-weget ne o missing ne ibu plastic koyob konoretab plastics en ole keringet.

Refuse-esien-ole imugaksei imuchi iesien iboisien bebabak yon iwendi ialisie imuch iib kinyondet ana ko bakit ne iboisen kora.

Ongeboisien tugul en kibagenge keboos weget ne ibu tugukab plastic.

Orib blue gum en ole lo ak ole rotune beek.

Kasire Joseph Gituma.

Echek temikab TIST en Igembe kemache kigimit membaekyok ak bikab kokwet konaam korib ak kotech ainosiekyok ak olekutunen beek. En kasarito kemaee keeshen minsetab ketikab blue gum en komaswechu kagemwa. Kogesich begunetab beek

che rote en ainosiek che mi ole mi blue gum.

Omin ketik che chang chebo gaa en ole bunei beek ak kerib beekyok ak kerib emenyon si komaong koristo ne kararan.

Kibagenge keribe ak keteche ainosiekyok.



Konyor temikab TIST keljinet netai koyob ribenywan nebo ainosiek koyb minsetab ketikab gaa en ole bunei ainosiek.

Kasire Jeniffer Kithure

En temikab TIST,

En keny ko kikim ainosiek ago kimagetile ketik ak ketem olenegiten ainosiek ak ole saoset. Raini, kegeere ainosiek che chang koyamdos agobo banganutik che yaach.

Kigochob banganet ne mie TIST en ribsetab ainosiekyok en minsetab ketikab gaa en ole negiten ainosiek. En libanetab ketik ne rubei, kurupisiek mut che mengech kosiche keljinet ne tesat koyob kasitnywan ne mie nebo ketikab gaa en ainosiek.

Kurupisiek che indoe ko;

1. Kurupitab Kajoroge ,2008KE332 en klastaitab Kianjagi.
2. Kurupitab Kabari Musingi,2008KE670 en klastaitab Ngariama.
3. Kurupitab Mwirutiri, 2008KE2015 en klastaitab Muthambi.
4. Kurupitab A nebo kwonyikab Kerere, 2008KE1191 en klastaitab Njukiini
5. Kurupitab Ethi Junior, 2010KE10 en klastaitab Murangai

Eustace Njeru ko membayatab kurupitab Kajoroge, agenge en kurupisiek che indoe. Kiminchi TIST ketik 241 ak ketik 201 en chuto kobo gaa. Kigomin muuru, meru oak, mutuja, Brachystegia ak mukwega, Bridelia taitensis. Boisien ketichu en chebetab kumik ,ak kotile temenik koboisien en kwenik. Ketichu koribe nguni tabandaitab ainetab Mara. Ine ak kurupinyin koyolchin PES en libanet ne rubei. Lelen boisen rabinichuto kotech kabetisiek alak komichi TIST ketik alak. Njeru koguure temik tugul chebo TIST ak Kenya komugul, "Ongeboisen tugul asi ketech ainosiekyok ak kerib emenyon en minsetab ketik che chang che bo gaa."

Membraek alak chebo kurupisiek che indoe kochobotin kotech ak korib ainosiek asi koter ibetab ngungunyek ak koek karagutyet asi kosib membaek alak che chang banganutichuto kororon. Mine keti chebo gaa, bambooisiek ak suswek korib tabandab ainosiek. Mwae kole kichutei TIST asi koboisen en aldaetab koristo, komin keti che chang ak koboisen tugul en ribsetab emet. Geere tai en rabinik che nyorunei ketikab gaa en ribetab emet(PES) ak kora kelchinosiek alak che siche ichek

ak bororiet en ribsetab ole kutune beek. Kure chitugul ne menyei ole negit ak ainosiek koboisen kibagenge asi korib ainosiek asi kesich beek che tililen ak ko chang ak keboosen mianwogik che bitune beek.

Temichuto koyaei boiset ne kararan en ribsetab beekyok, asi magiwech, si korib emet. Ketik ak timwek kotuchei ak koyaei ngwony kokaitit, ak ngo kaitit, ak koyaei tigitik kobun ngungunyek, koname ngunyut beek en kasarta ne o. Niton koyaei ketik chebo gaa korib beek ak ngungunyek ak tililindo ak changindaab beek. Niton kotoreti kongan beek che tililen chebo bik ak tuga en oleroten beek Temikyok che chamatin, ongechobogen kerib ainosiekyok, aururiet ak silangaisiek. Ngot ko ma kiegu inet en ribsetab ainosiekyok, ngoiyonditab betetab beek koetu. Komawek ole mi ngwony robta ak ole ma mi koegu melewet ak ole toldolat kongemaksei kora. Bik che chang koyache kobagakta korkwaak kochengat beek ak koib ngoiyondit en bik che menyei ole mi beek. Ongeegu che bo rirge en lagokyok ak lagokab lagokyok, asi kosich ngungunyek che toldolen, beek che kororon ak emet ne kararan ne boiboenchin.

Achutitoi ano?

Ketit ne kararan ne bo gaa.

1. Ma mi temisiet en mitaisiek 30 en ole mi ainet ak ketik.
2. Ma mi blue gum e mitaisiek 100 nebo ainet en ketik.
3. Matitil ketikab gaa .
4. 30% chebo ketik konyolu k obo gaa
5. Min ketik che chome beek ak suswek en mitaisiek 30
6. Kakwautiet ne yamaat ne bo mitaisiek 2 ak kotestai kotiengei ketik

Ngot ko kainyoru magutik che mi barak yon, ago imache iegu temindetan oldaab beek (riparian farmer) , teben ne telechin klastaingung, chigilindet anan Jeniffer en 0726 319539. Ngot ko itchin ketiguk, ko imuch inyoru tesunet niton bo PES ak iegu ararutyet en temik tugul en Kenya.



It is Election Time: Elect your Group of Cluster Council Representative.

Last month, we requested you to prepare for elections for the council representatives. This is now time to decide and elect your cluster representatives in Group of Cluster Council.

A Group of Clusters is 2 to 4 clusters close enough to be able to share equipment and training capabilities.

You have this month of November to elect one man, one woman to represent your Cluster at the Group of Clusters (GOC) Council.

The representatives you will elect should NOT be a presently serving Cluster Leader, Co-Leader, or Accountability Person, nor a IC Quantifier, nor an Auditor. Rather, they should be elected representatives who will serve your Cluster for a six month period.

The Group of Council (GOC) will be meeting monthly.

Responsibilities of elected Group of Clusters Representatives:

1. Discover and share Best Practices from Clusters;
2. Assure high quality training for the Clusters following TIST Values;
3. Assure high quality Quantification following TIST Values;
4. Assure working equipment for training and Quantification;
5. Report concerns and make recommendations for policies to Regional Council;
6. Expand TIST through present Clusters;
7. Hold Administrative Hearings if a Quantifier or Trainer is suspended to investigate facts and make recommendations on suspension;
8. Hold Administrative Hearings if a Cluster Leader is not following TIST Values;

9. Recommend people from the Group of Clusters for additional TIST responsibilities such as Auditor, TSE, or Master Trainer.

General procedure for Group of Cluster Council Elections.

1. Those who are eligible to participate in election must be members of the cluster holding elections. Outsiders will be considered as observers.
2. Applications to contest in position of Group of Council representative shall be announced by the interested persons during the Cluster meeting. Candidates must be members of active TIST Small Group.
3. Gender balance is a requirement that a Cluster should consider when electing Group of Council representative. One man and one woman.
4. The Cluster members shall appoint a team of 3 persons to oversee the election. The leader of this team shall be called an overseer. The Overseers shall not be candidates. The Overseer Team shall organize for the conduct of democratic elections.
5. After the elections, the Overseer Team shall immediately (within 2 days) notify the results of the elections, through a phone call, to Emelda Kigetu – 0727 99 20 40.
6. The Overseer Team should include the following details while notifying the results:
 - Name of the Cluster where elections were held.
 - Date of the elections
 - Name of each representative elected, his/her telephone contact and name of his/her group.



Ni igita ria kuthuurana: Thuura murangamiri wa cluster yaku ndene ya gikundi gia cluster.

Mweri muthiru, nitwaburirie kuthuranira niuntu bwa kithurano kia arungamiri ndene ya kiuthurano kia gikundi gia cluster inyingi. Nandi ni igita ria kuthura na gutara murungamiri wa cluster yaku ndene ya kiuthurano kia cluster inyingi.

Kiuthurano gia cluster ni gikundi gia cluster ijiiri gwita ithano iria cirri akui uria ciumba kugaana into bia uteri miti na uritani.

Burina mweri juju jwa ikumi na jumwe gutara mwekuru umwe na ntomurume umwe kurungamira cluster yenu ndene ya kiuthurano gia gikundi gia cluster (GOC).

Murungamiri uria bukathuura atibati kwithirwa agiitaga ngugi thaa iji ta mutongeria wa cluster, mutetheria wa mutongeria wa cluster kana mwiki mantu jegie utumiri bwa mbeca cia cluster kana mutari miti wa cluster kana mutegi ngugi. Indi nibabatare kwithirwa bari arungamiri baria bathuri baria bakaritira cluster ngugi igita ria mieri itantatu. Gikundi giki gia cluster gigatirimanaga o mweri.

Ngugi cia arungamiri ba cluster athure:

1. Bamenye na bagaane mitire iria miega buru ya kuthithia mantu kuumania na cluster;
2. Bamenyeere uritani bwa iguru ndene ya cluster bakithingatagira mantu jaria TIST ikiirite;
3. Bamenyeere utari miti bwa iguru bakithingatagira mantu jaria TIST ikiirite;
4. Bamenyeere ati into bia gutumira kuritana na gutara miti birio;
5. Bauge mantu jaria bakuthuganiria na bagaane mantu jaria jomba kuthiria thina iu kiri kiuthurano kia antu kana ntuura inene ;
6. Batambie TIST gukurukira cluster iria irio;
7. Bathithie igita ria kuthikira magamba riria mutari miti kana muritana arungamua ngugi bagicwaga uuma bungwa na bauge niatia antu baba babati kuthithirua riria barungamitue ngugi;
8. Bathithie igita ria igamba riria mutongeria wa cluster atikuthingatira mantu jaria TIST ikiirite;
9. Bataare antu kuumania na gikundi gia cluster

ikenda boongerwa ngugi cia TIST ja kua mutegi ngugi, TSE kana murungamiri wa uritani.

Njira iria ibati kuthingatwa igita ria nthurano cia kiuthurano gia gikundi gia cluster.

1. Baria boomba gutonya kiri nthurano no mwanka bethire bari amemba ba cluster iria irina kithurano. Antu baome bakajukua bari ba gutegeera.
2. Baria bakwenda kuthurwa kiri giti kia murungamiri wa cluster bakauga uu mucemanione jwa cluster. Baba no mwanka bethire bar indene ya ikundi biria bionekaga mantune ja cluster rionthe
3. Cluster no mwanka imenyeere ati aka na arume nibarungamiri riria bukwenenda kuthithia nthurano cia arungamiri ba cluster ndene ya gikundi gia cluster. Muka umwe, ntomurume umwe.
4. Amemba ba cluster bagatara antu bathatu ba kumenyeera kithuurano. Mutongeria wa gikundi giki agetwa mutegeri umunene wa mantu jonthe. Ategeri babanene batithirua bakiendaga gutarwa. Gikundi giki gia gutegeera gikabangira kuthithia kithurano gitina kwendanira.

Nyuma ya kithurano, gikundi giki gia gutegeera mbele ya ntuku ijiiri ithira, gikeera cluster nibau bakurukite gukurukira kuringa thimu kiri Emelda Kigetu-0727 99 20 40.

Gikundi giki gia gutegeera kithurano nikibati kuuga mantu jaja riria gikuuga baria bataari;

- Riitwa ria cluster iu kithurano kithithitue.
- Tariki ya kithuurano
- Riitwa ria o murungamiri uria utaari, thimu yawe na riitwa ria gikundi kiawe



Ni hindi ya guthura atongoria anyu kuuma Cluster thiini wa Group of Cluster Council.

Mweri muthuru nitwakuririe wiharirie guchagura arugamiriri thiinii wa kanju ngurani. riu ni ihinda ria kuamura na guthura atongoria aria marimurugamiriraga thiini wa knju ya ikundi cia Clusters.

Gikundi kia Clusters kiina clusters igiri (2) nginya ina (4). Clusters icio niciagiriirwo nigukorwo ikuhananiirie nigetha ihotage gutumira indo cia wira hamwe na ithomo cia TIST.

Mweri uyu wa kanyua hungu kana wa ikumi na umwe, cluster yanyu niyagiriirwo ni gucagura mutumia umwe na muthuri umwe aria marikoragwo thiini wa kanju ino ya Group of Clusters.

Andu aria muguchagura matiagiriirwo ni gukorwo mari atongoria aria mari itiini cluster yanyu ario o leader, co-leader, accountability person. Makiria na uguo, matiagiriirwo ni gukorwo maari quantifiers (Atari a miti) kana trainers (arutani). Magiriirwo ni gukorwo maria andu aria mwichaguriire inyue enye na marikoragwo magitungata gwa kahinda ka mieri itandandatu. Kanju ini ya Group of Cluster Council iricemanagia mweri riita rimwe.

Mawira na utangata wa andu aria mugucagura ugokorwo uhana ta uu;

1. Kuhumbura na kumenyithania maundu maria macacirite kuuma .
2. Gutigirira ati mourutani thiini wa clusters ni ikiro cia iguru na ugagokorwo ukirumirira TIST values.
3. Gutigirira ati uteri wa miti niwa ikirwo cia iguru na niurikoragwo ukirumirira TIST values.
4. Gutigirira indo cia wira niiraruta wira wega hari wira wa urutani na uteri wa miti.
5. Kumenyithia Regional council maundu ma bata kana undu uuingi o wothe.
6. gutheremia TIST cluster-ini iria twina cio kahinda-ini gaaka.

7. Kanju ino ya Group of Clusters niirikoragwo igithikiriria na gutua matua thutha wa quantifiers kana trainer atuika ni arugamio wira ni undu wa itumi ngurani.

8. o hamwe na uguo, kanju ino nirithikagiriria cira angikorwo mutongoria wa Cluster ndararumirira TIST Values

9) Kanju ino noyo irikoragwo ikiamura na kuuga andu aria mangienda maheo mawira ta gutuika Auditor, TSE, kana Master Trainer.

Mitaratara ya guthura arugamiriri thiini wa kanju ya Group of Cluster

1. Andu aria magorwo magithurana kana guthurwo no nginya makorwo mari ameba a cluster yanyu. Andu a nanja magakorwo mari o eroreri tu.
2. Andu aria makenda guchagurwo mgiriirwo ni kwaniririra wendi wo thiinii wa cluster. Aria makenda guchagurwo no nginya makorwo na ikundi ngaciiru thiini wa TIST (active TIST Group)
3. O Cluster no nginya ichagure mutumia umwe na muthuri umwe.
4. Amemba a Cluster nimagiriirwo ni guchagura andu atatu a kurugamirira githurano. Andu aya atatu matiagiriirwo magikirwo makihuranira giti na magiriirwo nigutigirira guthurano kina waragania.

Thutha wa guthurano, mutongoria wa arugamiriri a githurano niagiriirwo ni gutuma matokeo ma githurano gwa kahinda ka thiku igiri. Agiriirwo ni kuhurira thimu Emelda Kigetu – 0727 99 20 40.

Matokeo magiriirwo ni gukorwo na maundu maya;

- Riitwa ria Cluster yanyu
- Muthenya uria githurano giekirwo Date of the elections
- Andu aria macagurwo na namba cia thimu ciao



Ni ivinda ya uyuvani: Yuva muungamii wa kikundi kyenyu. (Group of Cluster Council)

Mwai ula unathelile nitwaukulitye wiyumbany'e kunyuva ula ukamuungamia kwa kanzu ya ikundi (Council representative). Yu ni ivinda ya kuamua na kunyuva ula ukwenda akaungame vandu venyu nthini wa kanzu ya ikundi.

Ngwatanio ya tukundi kati wa 2 na 4 ithengeanie kiasi kya utumiania miio na umanyisyo ula manengwa.

Wina mwai uyu wa November kunyuva munduume umwe, kiveti kimwe kwithiwa kimuungamia nthini wa ngwatanio ya kanzu wa ikundi (Group of Clusters Council, GOC)

Andu ala mukunyuva mayailwe ithiwa me ofisini kana maithukuma thini wa utongoi wa kikundi kyeyu ta Muungaimi/mutongoi, munini wake, mwii wa kinandu kana Muthiani/Muthuimi (IC Quantifier) kana mukunikili wa mavuku (Auditor) wa kikundi lakini ethiwe e mundu waa thukuma kikundi vandu va myai ta thathatu.

Atongoi ya ma kanzu uyu (GOC) makoombanaa kila mwai.

Mawia ma aya mekuyuvwa kuungama vandu va kikundi

1. Kumatha nzia nzau sya kuendesya mawiko ma ikundi.
2. Kuikiithya umanyisya mwiniu thini wa ikundi kuatinania na uthui wa TIST.
3. Kuikiithya syindu ila mbailu/syina useo wa iulu nisyu sya vitukuthwa kuatinania na walany'o wa TIST.
4. Kuikiithya miio ya kuvundisya na kuvitukithya
5. Kutunga livoti na kunengane mwolooto vala vena vata.
6. Kuthathasya TIST kwisila kwa ala ene ala mevo.
7. Kukwatiia mathina ala matonya kumila ethiwa muthuimi kana muvundisya kuungamw'a na kukunikila uw'o wa kuungamw'a wia kwoo.

8. Kwithiwa na ukunikili na kwithukiisya ethiwa muungamiia wa kikundi nde kuatiia walany'o wa TIST.
9. Kukusiia andu kuma ikundini kunyuvwa ma wiani ma TIST ta Auditor, Tse na Master Trainer.

Nzia ya kuatiwa nthini wa uyyvani uyu.

1. Ala mailitwe ni kunyuvana ni ala ni ene kikundi indi to andu kuma nza. Andu ma kuma nza mailitwe ithiwa me asyaiisya tu.
2. Kwitya kunengwa kana kukitia kivila kikundini kya kwithiwa wi umwe wa Kanzu ikatangaaswa ni ula wina wendi wa kukyukitia wumbanoni wa kikundi wa kila mwai. Ala mekwenda unyuvwa nonginya methiwe me ene kyama/kikundi kya TIST.
3. Wiananu wa aume na aka niwaile usiw'a yila kuusakuanwa Munduume umwe na mundu muka umwe.
4. Kikundi kikasakua andu atatu kusyaiisya unzakuani. Mungamii wa kikundi akeethiwa e musyaiisya na ndakithiwe e umwe ukwitya kunyuvwa ena ala angi manyuvitwe kika uu makaikiithya kana ni meeka unyuvani wa kyeni.
5. Itina wa unyuvani/usakuani kikundi kila kiungamie usakuani maka nengane livoti ya usakuani kwa sia ya kukuna simu kwi Emelda Kigetu - 0727 992 040
6. Aungamii aya makanengane livoti ino makanengane :-
 - Isyitwa ya ngwatanio/kikundi
 - Muthenya wa usakuani
 - Isyitwa ya kila mundu unasakuiwe, namba yake ya simu na isyitwa ya kakundi kake.



Ngunon ko kasartab lewenisiet:Olewen kandoikwok che bendi Council.

Arawani konye, ko kigitebenak ochopchigei lewenisiet ne bo kandoik chebendi Council . Ngunon ko kasrata ne kimwae ak kelewen kandoikab klastaisiek che bendi Council.

Kurupitab klasta ko klasta 2 agoi 4 che negitchin che imuche kopchei mashinisiek ak ngalekab kanetisiosiek.

Otinyei arawani bo 11 olewen muren agenge, kwondo 1 che bendi kandoiwok en kurupisiekab klastas Council (GOC).

Kandoichoton che obendi oleweni KOMA NYOLU ngunon ko kandoik en klasta ,kandoindet,rubeiwotab kandoindet ak chitab hesabu ,anan Kaitindet,anan ko chigilindet .Negata ko nyolu ko kandoik che nyolu koboisewok en kasratab arawek lo.

Kandoik che bo kurupitab klastaisiek (GOC) kutuitos kila arawet.

Boisionikab kandoik che kagilewen koba kurupitab klastaisiek GOC.

1. Kocheng ak kopcheita boisionik che kororon en klastaisiek.
2. Kogeer kole kaginyor kanetisiet ne ititaat en klastaisiek ak kagisib tolochikab TIST.
3. Kogeer kole kaginyor kanetisiet ne bo barak kisibi tolochikab TIST.
4. Kogeer kole kaginyor mashinisiek ak kanetisiet agobo kaitisiet.
5. Kopcheita logoiwek che kaginyor ak koyai oratinwek chegimuche kisib kogochi Regional council.
6. Kobaait TIST koyob klasatas chebo nguni.
7. Koyai tuiyet ne bo kaset yon kagi yon Kaitindet anan ko kanetindet asi konyor ngalekab iman ak amune asi keon ak kogon ole kimuche keyai.
8. Koyai tuiyet kogas logoiwek agobo kandoindet ne ma isib tolochikab TIST.

9. Kopchechi boisiet kandoik alak en TIST che kimuche kigochi boisiet age neu chigilindet, kanaamindetab klasta anan ko kanetindet ne o

Kasibutik che kisibi en lewenisietab kandoikab GOC.

1. Bik che nyolu kolewenis konyolu ko membaekab klasta che lewenisie. Bikab sang kiite kou kerik.
2. Magetab somet keborjigei boroindaab Group of Council konyolu komwaita chito ne mache en kasartab tuiyetab klasta.Che mache kelewen ko nyolu koyobu kurupit ne mining ne bo TIST ne tese tai.
3. Nyolu kegeer kele kaginyor gerkeindo en murenik ak kwonyik yon kileweni kandoichu.Muren agenge ak kwony agenge.
4. Membaekab klasta konyolu kokwai bik somok che tononjin lewenisiet.Kandoindetab bichu keguuren Geerindet ne o.Geerik ko ma nyolu komache kelewen.Kurupit ne bogeerik konyolu kogeer kole kagiyai lewenisiet ne bo iman.
5. Yye ibata lewenisiet, konyolu komwaita geerik en chokyinet (en betusiek 2) agobo bik che kagilewen koyob birtaetab simoit, koitchi Emelda Kigetu-0727992040.
6. Geerichu konyolu kotesta ngalechu en yon mwaitoi agobo mangunet
 - ◆ Kainetab klasta ole kagiyaen lewenisiet.
 - ◆ Tarigitab lewenisiet
 - ◆ Kainetab chi age tugul ne kagilewen, simoinyin,ak kainetab kurupinyin