

Mazingira Bora

TIST



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

English Version

An Environmental, Sustainable
Development and Community Forestry
Program.



TIST Quantifiers in a recent seminar at Gitoro Conference Center, Meru.

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Thinning and pruning your trees for successful growth.

By Ben Misleh

In general, the purpose of thinning and pruning trees is to improve individual tree health, as well as overall forest health. This is done by selecting the “best” trees in the forest. For many species, including hardwoods, grevillea, eucalyptus and cypress, these are often the largest trees, each with a single, straight stem. Trees may have different needs for space depending on species, site, planting style (woodlot, incorporated into crop fields, or windbreak), and climate, but some general principles apply.

To grow strong, healthy trees, a spacing of two meters is recommended. This spacing works for many TIST trees (i.e. grevillea, and cypress), but remember some trees require more space (mango and macadamia, for example). Giving trees proper spacing helps them get enough water and nutrients to grow to their full potential. Closer spacing is acceptable when trees are young. As the trees begin to mature, some trees will be larger and more robust than their neighbors. These are the trees which should be kept. In determining which trees should be removed, look at the best trees and determine if they are appropriately spaced. If they are not, you should remove some nearby trees.

Once you have determined which trees to remove, cut these at the base of the tree. In the weeks and months following cutting, many trees will begin to sprout from the stump. To keep the tree from coming back, cut or break these sprouts off at the base of the tree.

One of the easiest ways to determine if a tree should be taken out is to look at its size relative to nearby trees of the same age and species. Tree growth will vary based on soil, water availability, etc. In general, if all trees of the same species in an area are close to the same age, the larger trees should be chosen to allow to grow. Another good indicator of tree health is the position of the crown of the tree in the canopy. Trees with crowns above the general canopy level can absorb more light than those lower down, and so can grow better. Finally, trees should have a single stem, with no major disease or rot. However, this does not mean that all small trees should be removed! Aim for a two meter by two meter spacing so that the trees are as large and as healthy as possible to maximize carbon capture.

When making thinning choices, remember that growth rate varies greatly by species. If a mango tree is growing near lots of eucalyptus, the mango may be far smaller and slower growing than the fast-growing eucalyptus, but it certainly should not be cut simply because it is smaller! In fact, a tree like mango is of great importance due to its usefulness in producing fruit for food and sale. Mango also is better for other crops growing in the field. Eucalyptus can make other trees and crops nearby grow poorly. It is important to remember this as you select which trees to thin. There are many uses for trees, depending upon species besides carbon capture. For example, you may want trees for shade. In this case, you should give the tree more room than usual to expose the tree to more sunlight. This will stimulate the tree to produce new branches on the main stem and on larger limbs. If you want to use a row of trees as a windbreak, keep trees in that row spaced closely together, but remove trees to either side in order to increase the “bushiness” of the trees.

Pruning

In a natural forest, trees naturally self-prune. Branches in the upper canopy shade out lower branches. As leaves on the lower branches begin to die off, so does the branch to which they are attached. Dead and rotted branches naturally fall off or are knocked off. While natural pruning may happen on TIST sites, it may be necessary, or beneficial to prune trees by hand. While each tree species requires a different pruning technique, some general principles apply to all trees as you decide which limbs to remove.

Most tree species should have a single main stem at the ground level. Trees with a single stem generally grow faster and are less prone to split during storms. If a tree with multiple stems is chosen as a crop tree, when choosing which stem to keep, generally choose the largest, but make sure it is healthy, with lots of leaves, free of rot, and relatively straight.

Many people think you should cut limbs parallel to the trunk. This is false. Cuts should be made perpendicular to the limb, slightly out from the trunk. This minimizes the amount of exposed wood, and allows the actively dividing cells in the branch

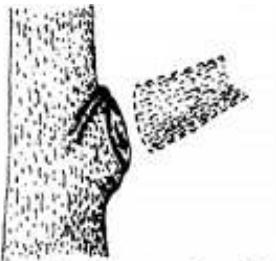


collar to grow over the cut over time (see figure 1). This helps the tree to remain healthy and free of rot.

When pruning, don't be overzealous. Tree trimmings are often used for fuel wood or fodder. While this is good, remember that while pruning can improve tree health and increase growth over time, removing leaves

will initially reduce the tree's ability to capture sunlight and cause stress to the tree by creating a scar, which it must heal. If you remove too many, the tree will grow slowly or may die. After removing a limb, leave the area cut alone. Do not cover it with tar or any other material, so the tree can expel any toxic material on the wound. This is essentially the same process used by the human body to heal a cut.

Don't forget that trees tend to produce new shoots near cuts from thinning or pruning. Some species do this more than others. Generally, these are very easy to remove during the first year after



Pruning cuts should be made just outside the branch collar.



On a dead branch that has a collar of live wood, the final cut should be made just beyond the outer edge of the collar

cutting by simply snapping off the supple shoots. Shoots will often not grow back.

Some trees, especially fruit trees, produce better yields with multiple stems. These are cut near the base of the stem when they are young in order to stimulate new growth. Once the tree has established these new

shoots, they too may be cut in order to produce more growth. This process may be repeated in order to increase the bushiness of the tree, but be sure to allow at least a few months or more between trimmings so the tree can recover from the stress caused by cutting.

Remember that to take part in the carbon market, we have to commit to keep trees for the long term. We should allow trees to grow for at least 30 years, thinning and pruning to produce useful, sustainable forests that provide us benefits for years to come.

Opportunities to help TIST

Great things have been happening with TIST. All of you know about being "1st in the World" with our certification of carbon credits. All you know that we have signed an MOU with the Kenya Forest Service. Most of you know that we are continuing to expand in all areas where TIST Kenya operates.

Along with all this good news, there are new opportunities for TIST members to take an active role to serve and improve TIST in Kenya. We are looking for TIST members who have a real desire to help expand the TIST program, who want to work with new partners, who want to improve the operations of TIST, and who want to make sure that more farmers get the opportunity to benefit from carbon credits and other TIST programs.

Below are some opportunities for increased TIST participation and servanthood. All of these positions will require that a TIST participant is very active, that their group is active, and that they demonstrate the TIST Values in their personal lives.

The people who take on these responsibilities will be working with the Leadership Council and others to make sure that TIST continues to be "Low Budget-Big Results"! So, look over the list and see if one of the responsibilities on it calls out to you and makes you say "yes, this is a place where I could really help TIST!"

- Coordinating partnership with Catholic Relief

Services and their green gram project

- Coordinating partnership with Catholic Relief Services and their microfinance project, SILC
- Supporting TIST expansion in Mbeere
- Associate editor for *Mazingira Bora*
- *Mazingira Bora* production and distribution coordinator
- Regional Training Coordinators
- Coordinators for new TIST partnerships in Yatta, Mombassa, and in current areas
- Clay Stove program expansion through Helped to Help
- Manufactured Stove design, manufacture, testing coordinator
- Manufactured Stove program expansion through Helped to Help
- Conservation Farming program expansion
- Indigenous tree PES program expansion
- "Marketing representative" to contact Kenyan companies about planting trees or carbon credits.
- Coordinators for TIST Councils in Groups of Clusters and in Regions

We have appointed 3 Leadership Council members who all are "new" to the TIST program to help coordinate the process of people having the opportunity to apply for, be interviewed, and, if successful, to take on one of these new



responsibilities. These are members are: Mary Kathei – 0726283425, Purity Mugo at 07119815, and Susan Kinanu at 07111721219. Susan will be responsible for the applicants from Meru and surrounding areas, Purity for Mbeere, Kirinyaga and surrounding areas, and Susan will be responsible for Timau, Embu and surrounding areas.

If you are interested in applying for one of these responsible positions, please contact the person responsible for your area. A text message or call is the best, but you can also inform members of your leadership team in your cluster, and they can pass along the information to Mary, Susan, and Purity. If you have any questions, please contact your Leadership Team in your cluster.

Why should I want to be elected as a cluster leader?

With over 100 clusters now in TIST, we have the opportunity to have over 300 new leaders being identified each year by their fellow TIST participants. This is wonderful proof of how much capacity the TIST Program is developing in Kenya.

It is also a large opportunity for individual TIST participants. Someone who is elected as a Cluster Leader (Accountability Person, Co-Leader, or Leader) has a one-year opportunity to receive additional education, practice their leadership gifts, learn much more about the equipment and the techniques used for Quantification, understand the carbon business much better, and serve their fellow TIST members in their area. They will have the opportunity to attend Seminars, to work with the Quantifier and visit each of the TIST Small Groups in their Cluster, to see the Best Practices that are being used in their cluster, learn about improved stoves, learn about the benefits of many tree species, and many other topics.

Of course, being a Cluster Leader is hard work. Going and visiting the Small Groups in your Cluster involves lots of walking, talking, watching, and learning. Keeping the records of the achievements of the Cluster requires time and concentration. Organizing so that the TIST Small Groups can get paid is also hard work. Learning to use the handheld computers, the GPS, the reporting systems, and organizing for excellent training and interesting monthly meetings—all of that is hard work. As many of you know, when you go to a TIST Seminar you have a good time—but you also work very hard. You work the whole day, and then have homework at night!

So you should only be interested in being elected a Cluster Leader if you have a great desire to learn more, and work hard to be a good servant to the Small Groups in your Cluster. But if you have those desires, and you do get elected, it can become the beginning of even more opportunities in the TIST Program. You decide.

Lamuria TIST Region: Farmers Educating Farmers.

By Joseph Thitai.

TIST Lamuria region has 10 clusters: Kiahuko, Male, Matanya, Thome, Muhonia, Mweiga, Weruini, Sweetwater, Kamangura and Chuma. Each of these Clusters meet every month at a central location that is convenient for every TIST farmer to walk to and from their homes.

During this season, Clusters are carrying out leadership elections. This time, each Cluster is electing a new accountability person. The previous accountability persons became the co-leader and co-leader became the leader while the leader rotated out.

Cluster member truly appreciate this rotational leadership model. Every farmer has a chance to lead and no single person carries the burden of leadership and responsibility alone.

Some of the above Clusters have established kilimo hai/ Conservation Farming (CF) demonstration plots. These plots help farmers to learn, practically, how to correctly and accurately practice CF and to see the benefits with their own eyes.

In this region, through Cluster meetings, farmers are sharing knowledge on best trees species to plant in an arid region. Farmers are learning and educating each other on seed collection, seed treatment and propagation and on nursery preparation and management. Further, they are learning best practices in tree planting and grove management.

Such trees as Acacia, Muringa, Avocados, Mipera, Mikinduri and Muthiga are gaining acceptance and popularity. These trees have additional benefits besides generating income from carbon credits. They give fruits, nuts and some have medicinal value. Croton seeds from Mikunduri trees are used for bio-diesel making. A factory has been set up in neighbouring Narumoro region that manufactures bio-diesel.

The above and many more benefits in TIST are encouraging many more farmers wanting to join TIST. We are ready to recruit, train and share our knowledge and experience with them.



Igembe TIST Region: We are servants to each other, and together we achieve more.

By Joseph Gituma

TIST is continuing to grow in Igembe region. Many farmers who attended, heard or read about TIST's successful validation and verification are now more encouraged to plant more trees. Farmers who attended TIST Farmer celebrations at Gitoro Conference center in Meru in June, brought us a lot of reading and information materials. Further, we have continued to read monthly *Mazingira Bora* articles which are informative and educative.

Now, we have re-energized clusters. Area Coordinators are working with Cluster leaders, trainers and quantifiers to serve farmers. New areas want to join TIST as a result. These are Mutuati and Matiandui.

More farmers are joining existing Clusters such as Kawiru MCK and Antubochio.

On quantification, 13 groups have so far been quantified between July and Mid –August this year.

Monthly Cluster meetings are helping farmers share and receive trainings. Farmers have been trained about Conservation Farming and some are practicing it. A number of farmers are also trying CF on drought resistant crops such as sorghum, millet and cassava, especially in drier parts of Igembe where rains are unreliable

We are encouraging each other to practice CF and also to plant drought resistant crops. This way, we will remain self reliant on food and even get surplus to sell.

Cluster reporting: Share your successes to make your cluster and TIST strong.

In TIST, we find strength in taking action together and sharing our successes with others in our Small Groups, in our clusters, and beyond. Monthly cluster reports on cluster meetings and accounting are an important part of this success. Each cluster is responsible for submitting a cluster meeting and cluster accounting report every month.

How to report Cluster Budget and Cluster Meetings using SMS

Transparency and mutual accountability are key values of TIST. Each TIST cluster must report how it spends its 900/= cluster budget to achieve big results. For two months, TIST has been using a new, easier way for Clusters to report their monthly budget use their Cluster Meeting Records using SMS. This approach allows a TIST member to send an SMS from their phone to a central phone number. SMS messages are collected and analyzed by TIST staff. If a cluster has access to a working Palm, they should use the Cluster Meeting and Accounting Forms on the Palms. However, with this new method, every cluster should report every month. This approach simplifies reporting for Cluster Representatives and helps TIST staff support Cluster activities.

Eleven clusters have done an excellent job on reporting cluster meetings. Igwanjau, Murinya, Ichuga, Kamuthanga, Miamoja, Tunyai, Matanya, Manyatta, Muriru, Matakiri and Chemaner each submitted cluster meeting reports in both June and July. Eleven clusters did an excellent job of reporting how they used their budgets for both June and July. These are Ankamia, Igwanjau, Kagaene, Kiahuko, Kiirua, Limoro,

Matanya, Mikunduri, Muriru, Ntrukuma, and Pondo. Most cluster submitted some reports, but 55 have not submitted any. If we do not receive reports from clusters, TIST staff may assume your cluster is inactive. In this case, you will not receive a budget, service from Quantifiers, or the chance to learn and share at seminars. Let's work to share our reports and our success every month!

For more information on reporting, contact your Cluster Representatives or your Area Coordinator. Reminder: for success, every month your cluster should:

- 1) Attend your cluster meeting and remind other groups to attend.
- 2) Review the results your cluster has achieved: new trees planted, groups quantified, and how budget was spent together as a cluster.
- 3) Send reports by Palm or SMS for Cluster Meeting and Cluster Accounting.
- 4) Organize quantification with Quantifiers. Make sure someone from your cluster assists in each quantification!
- 5) Invite your friends and neighbors to join TIST at a cluster meeting. Share this *Mazingira Bora* and help them with the application process.
- 6) Make bigger results! Plant trees, build or buy an energy saving stove, practice CF. Remember: a strong cluster should have at least 200,000 Quantified trees, 40-50 active Small Groups who meet each month, elected servant leaders, and be carrying out and reporting on good training and quantification. Together, we can achieve anything!



Together, we achieve more says Umoja 2005 TIST Small Group.

Prepared by Virginia Wairima

We, Umoja2005 TIST Small Group, joined TIST in 2005. Before joining TIST our group was registered under the Ministry of Social Services. Since we joined TIST we have worked a lot by helping one another to establish tree nurseries, build stove jikos and do Conservation Farming. Our Small Group now has 2,202 Quantified trees, including indigenous species like Meru oak and Cordia, as well as fruit and nut trees. Many of our group members have been

practicing CF and we have already prepared CF holes on our farms for the coming rainy season.

We are planning to start goat keeping and poultry keeping so we can increase our income. We are planning that one member will benefit from an improved stove jiko by next week.

We want to encourage other small groups to work together and gain more in TIST.

How can we fight forest fires? A little prevention goes a long way!

By Ben Misleh

Fire is natural, and under the right conditions, may improve soil and tree health. However, fire can also be bad for forests and dangerous to people if not managed appropriately. As TIST members, we should understand what causes fires and how we can to minimize the risk of large, dangerous, tree-killing fires.

There are two basic types of forest fires. The first is ground fire. Ground fire is usually slow moving and of relatively low temperature. A ground fire can help remove dead brush, grasses, and other low-lying debris. Because the temperature is low, it leaves only small burns on the base of the tree, and the bark protects the tree. This means ground fire generally will not kill the tree. When a ground fire gets too hot or fast-moving it can become a crown fire. In crown fires, fire spreads through tree canopies. Crown fire can be deadly for trees because it kills all of the leaves on trees and often kills the living tissue in twigs and branches. Death of leaves and tissue in branches makes it extremely difficult for the tree to recover after the fire.

A few easy steps can help ensure that if a fire burns through your forest, it does little damage to trees:

- 1) Plant trees at the recommended spacing of two meters by two meters (or more!). This is one of the easiest and most important things you can do to prevent deadly fires. This spacing gives the fire less fuel since there will be fewer branches on the ground and fewer dead trees in the forest. In a fire, these dead branches and trees act as ladders for fire to reach the tree canopy.
- 2) Cut low branches, especially dead branches, from the trees and remove dead trees entirely. Again, dead branches and trees provide access to the

tree canopy for the fire and make the fire burn hotter. Make sure you remove these pruned branches as well as other limbs or trees that have fallen naturally from the forest. Debris on the forest floor can quickly turn a low intensity fire into a stronger, damaging one that kills trees by destroying tissue in the stem and in fine roots near the soil surface. Gather dead wood, and benefit from both the reduced risk of fire and useful fuel wood!

- 3) Create firebreaks by leaving space between rows of trees to limit fire spread. You should not harvest forest you have already planted to create space between rows of trees, but when you plant a new forest, you may want to sacrifice planting a few trees to help decrease the risk of fire. There is no "standard" distance between fire breaks, and they are not always necessary. The purpose of a firebreak is to create an area with little or no fuel through which the fire cannot burn. When it reaches this bare ground, the fire will stop and not burn adjacent areas.

When making firebreaks, build with the contours of the landscape. Leave a bare strip across a hill, not up and down. Fires generally burn uphill, and on steep slopes easily go from slow, low intensity ground fire to fast-moving, high-intensity crown fire. Heat from flames lower on the slope rises, and preheats fuel further upslope. These fuels then ignite more easily when the fire reaches them. Because of this, it is especially important to do all we can to decrease fire risk on hills.

Every site has a different fire risk, and different techniques can be useful in different sites. Talk with your neighbors to learn what they are doing to prevent damaging fires

Mazingira Bora



Kimetu Version

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TIST Quantifiers in a recent seminar at Gitoro Conference Center, Meru.

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Kunyiyia na kugita miti yaku biang'i kenda inenea na gukura bwega.

Ni Ben Misleh

Antune anene, kunyiyia miti na kugiita biang'i, nigungethagia kuthongomia thiria ya o muti amwe na thiria ya mwitu junthe. Bubu buthithagua gukurukira gutaara miti iria mithongi buru ndene ya mwitu. Kiri mithemba ya miti imingi, amwe na mibao, mikima na mithithinda, iji niyo miti iria minene buru, o muti juri jumwe jutiumirite ingi rutere na jumutamburuku. O muthemba jwa muti nijwendaga mantu mwanya nikenda junenea na jua jumuthongi buru. Kwongera, mithemba imwe niendaga mantu mwanya kulingana na antu aria jugukurira. Kinya kethira miti iria iandagwa ndene ya murandi jwa TIST niandagwa na njira mwanya mwanya, (mung'uanano, miti iandi mwankene jwa muunda nikenda inyiyia ruugo na iria iandagwa ndene ya miunda iminene) miundene iri guntu mwanya mwanya (mung'uanano, ruteere rwa kuumira riua rwa Mt Kenya na rutere rwa kuthwa kwa riua rwa Mt Kenya) na rerene mwanya mwanya (mung'uanano, naria kuuraga mono), kuri mantu jamwe jendekaga kunthe.

Gukuria miti iri inya na thiria injega, guitarania miti na 2m nikwendekaga. Guitarania na meter ijiiri nikuritaga ngugi kiri miti imingi ya TIST (ta mibao, mikima na mithithinda), indi ririkana ati miti imwe niendaga guitarania gukunenene nkuruki (mieme na mikandamia). Guitarania miti bwega nikumiejaga kanya ga gukinyirwa na ruuji na irio bing'an, biria bitethagia miti kunenea mwanka aria ibati. Kuanda miti akui nigwitikiritue riria miti ianaki. Riria miti ikwambiria gukura, kuri na miti iria ikaneneanga na kugia inya kiri ingi. Iji niyo miti iria ibati gutigwa muundene (Imera miti). Kiri gutara ni miti iriku ikagitwa, tega miti iji mithongi na umenyekethira nitarenie bwega. Kethira ititarenie bweg, miti iria iri akui ikendeka kugitwa.

Warikia kumenya ni miti iriku ikugitwa, migitire nthiguru buru. Ndene ya biumia na mieri iria ikathingata, miti iji yauma kairi no igitwe kana ikaunirwa nthiguru buru.

Njira imwe iria mbuthu buru kumenya kethira muti nijubati kugitwa ni gutega uria jung'anaugiteganagiria na miti iria iri akui ya ukuru bumwe. Ririkana ati gukura kwa muti gukaringana na muthetu, ruuji na jangi jamaingi. Antune aria anene, kethira miti yonthe iria iri amwe iri na ukuru akui bumwe, miti iria minene niyo ibati guitarwa gutigwa muundene. Gintu kingi kiria umba gutega thiria ya muti nakio ni aria mathangu jaria maingi ja muti jou jari wateganiria na ingi. Miti iria iri mathangu jamaingi iguru ria miti ingi niumbaga kujukia weru bubwingi nkuruki ya iria iri nthiguru na kwou

igakuura bwega nkuruki. Kuthiria, miti iria igutigwa no mwanka ithirwe iri imitamburuku itiumirite ingi rutere na itina mirimo kana kurota. Indi bubu ti kuuga ati miti yonthe iria itinenenei igitwe. Muntu nabati gutegera guitarania kwa meter ijiiri ni kenda umensa miti ikunenea na yagia thiria injega buru nikenda ruugo rurwingi ruruthuku rumba kujukua.

Riria ukuthithia mantu jau jariau iguru, rikana ati gukuranga kwa muti ni mwanya mono kiri mithemb mwanya ya miti. Kethira muembe jurikuura akui na mibao imingi, muembe no jwithirwe junii mono nkuruki na jugikuraga gaporikuruki ya mubao juria jukurangaga, indi jutibati kugitwa nontu niju munini! Kwaria mma, muti ta muembe ni muti kimera juria juri bata niuntu bwa utumiki bwaju ja kuejana irio. Kurina utumiri bungi bubwingi bwa miti, kulingana na muthemba, tutigata kugwatia ruugo ruruthuku. Mung'uanano, muti nojwendeke niuntu bwa kirundu kiaju. Antune aja, nubati kua muti kanya nkuruki ya ingi nikenda jukinyirwa ni riua, riria rigatuma muti jugia biang'i bibieru kiri gitina na kiri biang'i biria biri iguru. Ukenda gutumira miti kunyiyia ruugo, nubati kumenyeera ati miti iu iri lainine nikwianiritie, indi rita miti nteere cionthe nikenda juumba kwengiyia mathangu na biang'i amwe.

Kunyiyia mathangu

Ndene ya mwitu jwa kuuma jungwa, miti nicinyagia mathangu yongwa. Biang'i biria biri iguru buru nibigwithagia biang'i biria biri rungu. Ouria mathangu jakooma kiri biang'i bia nthiguru nou kinya kiang'i kiria mathangu jau jari kiendeleagaa kuuma. Gujurukira kugaruka kwa rera ya ntuku, biangi biria bikuite na biria biori bikagua kana bigwithue. Kinya kethira miti nicinyagia mathangu yongwa muundene ya TIST, kwethira kubui kana kurina gitumi kunyiyia mathangu na njara. Riria ukuthuura ni biangi biriko ukugiita, nubati kuthingatira mantu jamakai. Kinya kethira o muthemba jwa muti nijwendaga njira mwanya ya kunyiyia mathangu, mantu jamwe nijathithagua kiri miti yonthe.

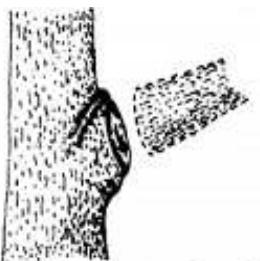
Mithemba imingi ya miti nibati kwithirwa irina gitina kimwe nthiguru. Miti iria irina gitina kimwe niyo ikurangaga na itiunikanga igita ria ruugo kana ngai inyingi. Muti jurina itina bibingi jwatarwa gutigwa muundene, kurina mantu jamaingi jaria uumba gutegera riria ugutara ni gitina giku ugutiga. Ja uria uumba kuthugania, gitina kiria kinene nikio kibati guitarwa gutigwa. Kwongera, gitina kiu kithirwe gitikurota, kionanie kiri na thiria (ta kithirwe kirina mathangu jamaingi), na kithirwe gitamburuki.

Gintu kimwe kithuganagirua uria gitibati niati

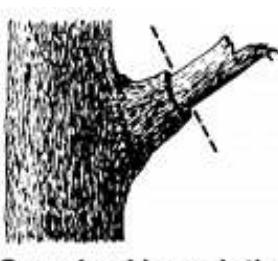


nuubati kugita kiang'i, winami bwa gitina. Bubu ni urongo. Ubatu kugita uumarite bwa ome ya gitina. Njira iji ninyiagia antu aria ugukunura na igetikiria muti juumba guciorangia kironda nyuma ya igitu. (Tega Mbicha I), untu buri butethagia muti gukara juri na thiria na jutikwora.

Riria ukunyiyia mathangu ukenda kuthithia uju mono. Biang'i na mathangu jaria jagitagua nijatumagirwa mono ja nkuu kana iria. Kinya kethira bubu nibwitikiritue buru, rikana kunyiyia mathangu nogutethie kuthongomia thiria ya muti na kujuneneangia igitene, indi kurita mathangu gukamba kunyiyia kuumba kwa muti kugwatia riua na nogutume muti jukaga inya nontu bwa kujwikira kironda, kiria no mwanka kiore. Warkia kugita kiang'i, au kugita gutibati gutongwa. Ugagukunika na gintu kinya gikari, nikenda muti jumba kurita maira kirondene. Iji noyo njira iria mwiri jwa muntu jutumagira riria jukworia kironda.



Pruning cuts should be made just outside the branch collar.



On a dead branch that has a collar of live wood, the final cut should be made just beyond the outer edge of the collar

Gintu kimwe kiria kiurairia kiri kunyiyia mathangu na kunyiyia miti ni ati miti niumagira itina bingi akui na aria kwagitwa. Mithembia imwe nthithagia uju nkuruki ya ingi. Antune anene, itina bibi biaritwa na uuthu mwakene jwa mbele nyuma ya kugita na njira ya kuuna aki. Jaria maangi itina bibi bitiuma kairi.

Miti imwe, mono

mitunda, ikaciara bwega nkuruki irina itina bibingi. Iji nigitawa akui na muthia jwa gitina iri iminini nikenda itina bingi biumira. Muti jwarikia kuuma tutina tunini, kinyatu notugitwe nikenda tungi tuuma. Bubu nobucokerwe nikenda muti jumata, indi menyeera ati nukua muti mieri imikai kana imingi nikenda yumba kwora kuumania na kugitwa kou.

Rikana ati gutonya thokone ya ruugo, nitubati gwika wirane gwika miti yetu igitu ririnene. Nitubati gwitikiria miti ikuura mwanka miaka mirongo ithatu, tukiminyagia na kunyiyia mathangu nikenda yumba kua miitu ya bata na iria tukomba gwika itue baita miaka iria iijite.

Twanya twa gutethia TIST

Mantu jamanene jijethiritwe jagikarikaga ndene ya TIST. Bwinthe nibukumenya kwegia kwithirwa turi bambele ndene ya nthiguru yonthe ndene ya ruugo rwetu gukrukithua. Bwinthe nibwije ati nitusainite baruga na thirikari ya mwitu ya kuritaniria ngugi. Baria baangi benu nibaiji ati nitugwita na mbele gutamba nkuruki ndene ya ntuura iria TIST iritaga ngugi.

Amwe na mantu jaja jamathongi, kurina twanya tutweru twa amemba ba TIST gicutonyithia na kurtirira ngugi na kuthongomia TIST ndene ya Kenya. Nitugucua amemba ba TIST baria barina rwendo rwa kama rwa gutetheria gutambia muradi jwa TIST, baria bakwenda kurita ngugi na antu baberu, baria bakwenda kunenenyia mantu ja TIST, nabaria bakwenda kumenyeera ati arimi bangi nibagukinyirwa ni kanya ga kwona baita kuumania na kwendia ruugo na mibangi ingi ya TIST.

Aja nthi kurina twanya tumwe nikenda TIST ineneyia uriti ngugi bwa amemba na kuritanira ngugi ya uthumba. Twanya tutu tunthe tukenda mumemba wa TIST uritaga ngugi rionthe, uria gikundi kiao kiritaga ngugi rionthe nab aria bathingatagira mantu jaria TIST ikagira ndene ya miturire yao bongwa. Antu baria bakajukia ngugi iji bakaritaniria ngugi na atongeria ba TIST ndene ya Kenya na bangi kumenyeera ati TIST nigwita na mbele kurita ngugi inene igitumagira mbeca inkai! Kwou, tega twanya tou wone kethira kuri ngugi igukubuiria na iria igutuma uuga, "ii, aja niantu mpumba

gutethia TIST mono!"

- Kubangania kuritaniria ngugi na kambuni ya Catholic Relief Services na mubango jwao jwa ndengu
- Kubangania kuritaniria ngugi na kambuni ya Catholic Relief Services na mubango jwao jwakuejana mbeca inkai, SILC
- Kugwata mbaru gutamba gwa TIST ndene ya Mbeere
- Gutetheria kuandika gatheti ya Mazingira Bora
- Kubangira kuthithua kwa Mazingira Bora na gwitambia naria ibati
- Abangiri ba uritani ndene ya guntu mwanya mwanya
- Abangiri ba uritaniri ngugi bwa TIST na antu baberu ndene ya Yatta, Mombasa na naria TIST iri mwanka thaa iji
- Gutambia mubango jwa mariko ja mutheku gukrukira mubango jwa Tethua Utethie.
- Mubangi wa kuthithua kwa Mariko, uria jakathithua na kujageria kethira nijagwita ngugi.
- Gutambia mubango jwa mariko ja kugura gukrukira mubango jwa Tethua Utethie
- Gutambia mubango jwa Urimi bubwega
- Gutambia mubango jwa miti ya gintwire (PES).
- Murungamiri wa TIST kiri wendia uria ukaranagia na kambuni cia Kenya kwegia uandi miti na thoko ya ruugo
- Mubangi wa canju cia TIST ndene ya ikundi bia



cluster na o guntu

Nitutarite amemba bathatu baria bari atongeria ndene ya Kenya baria bari baberu ndene ya mubango jwa TIST gutetheria kubangira ngugi iu ya antu kuuria ngugi iu, kwija kuurua biuria na bakuruka, kuewa ngugi imwe ya iu njeru. Baba ni: Mary Kathei - 0726283425, Purity Mugo -0724119815, na Susan Kinanu - 07117212219. Susan akamenyeera baria bakuria ngugi ndene ya Meru na naria kuthiurukite,

Purity ba Mbeere, Kirinyaga na naria kuthiurukite na Susan nawe akamenyeera ba Timau, Embu na naria kuthiurukite.

Ukethirwa urina bata ya kuuria ngugi imwe ya iji, itu ringira uria ukumenyeera ba ntuura yaku. Mwandikire ntumwa ya thimu kana umuringire, indi nowire atongeria ba cluster yaku nabo bakaaria na Mary, Susan na Purity. Ukethirwa urina biuria, aria na atongeria ndene ya cluster yaku.

Niki mbati kwenda guitarwa ndi mutongeria wa cluster?

Kurina nkuruki ya cluster igana nandi ndene ya TIST, turina twanya tutwingi twa kwithirwa turina atongeria nkuruki ya Magana jathatu baria bamenyekaga o mwaka ni amemba bangi ba TIST. Bubu ni unto buria bumba kwonania uria TIST igukuranga ndene ya Kenya.

Kinya ni kanya gakanene kiri o mumemba wa TIST. Muntu uria uthuragwa ja mutongeria wa clster (ja Mwiki mantu ja cluster, mutetheria wa mutongeria kana mutongeria) arina kanya ka mwaka ga kuthoma nkuruki, gutumira kiewa kia utongeria, kumenya kwegia into biria bitumagirwa na njira cia uteri miti, belewe kwegia thoko ya ruugo na baritire amemba bangi ba TIST ngugi ndene ya ntuura ciao. Bakoona twanya twa gwita semina, kuritaniria ngugi na mutari miti na kuriungira ikundi bibinini bia TIST ndene ya cluster ciao, kwona njira iria njega buru cia kuthithia mantu igituirwa ndene ya cluster ciao, bamenye kwegia mariko ja nandi, bathome baita cia mithemba imingi ya miti na mantu jangi jamaingi.

Imma, kuwa mutongeria wa cluster ni ngugi

injumu. Gwita na kuriungira ikundi bibinini ndene ya cluster yaku nijanagia na gwita na maguru, kwaria, kwona na kuthoma gukwingi. Gwika rekondi cia mantu jaria jathithitue ni cluster nikwendaga mathaa na gwika mathuganjo amwe gukunene. Kubangira nikenda ikundi bibinini bia TIST biriwa ni ngugi indito kinyayo. Kumenya gutumira into bia uteri miti, GPS, njira cia gutuma ripoti, na kubangira uritani bubuthongi na micemanio ya omweri imithongi-jaja jonthe ni ngugi injumu. Ja uria babaingi benu bajji, riria weta semina ya TIST nwithagirwa urina igita ririega- indi nuritaga ngugi inene mono kinya nao. Nuritaga ngugi ntuku yonthe na ukaewa kinya ya kurita utuku!

Kwou ubati kwenda guitarwa ja mutongeria wa cluster wethirwa urina wendo bwa kuthoma nkuruki na kurita ngugi nainya kuwa muriti ngugi umwega kiri ikundi bibinini ndene ya cluster. Indi wethira urina wendo bou, na watarwa, jwomba kua mwambirio jwa twanya tutwingi nkuruki ndene ya muradi jwa TIST. Citarire.

TIST ndene ya Lamuria: Arimi bagitanaga Arimi.

Ni Joseph Thitai.

TIST ndene ya Lamuria irina cluster ikumi. Iji ni Kiahuko, Male, Matanya, Thome, Muhonia, Mweiga, Weruini, Sweetwater, Kamangura na cluster ya Chuma. O cluster kiri iji nitiiaganaga o mweri antune gati gati aria o murimi wonthe wa TIST ombaga gwita na maguru kuuma na gucoka nja ciao.

Na ngugi cia cluster. Uria urari antu aja naraetherue mutetheria wa mutongeria na mutetheria wa mutongeria aethua mutongeria nontu uria urari mutongeria naraumire utongeriene. Amemba ba cluster nibakugwirirua utongeria bubu. O murimi ena kanya ga gutongeria na guti muntu umwe ugakamata murigo jwa utongeria na ngugi cionthe wenka.

Clusters imwe cia iu cirri au iguru cirina miunda iria barimite na njira ya urimi bubwega. Miunda iji niitethagia arimi kumenya bakionaga uria bomba kurima na urimi bubwega bwega na ithimi biria bibati biongwa.

Ndene ya ntuura iji, gukurukira micemanio ya

cluster, arimi nibakugaana umenyo kwegie mithemba ya miti iria ibui kuandwa antune guti na mbura inyingi. Arimi nibakuthoma na kuthomithania kwegie kwoja mbeu, kwithuranira na kuungania mbeu nikenda wona miti imiega nkuruki na kuthuranira na kumenyeera minanda. kwongera, nibakuthoma njira iria njega buru cia kuanda miti na kumenyeera miunda yao.

Miti imwe ta Acacia, Miringa, Avocados, Mipera, Mikinduri na Muthiga nikwendwa na kuandwa ni babaingi. Miti iji irina baita ingi cia kwongera kwona mbeca kuumania na kwendia ruugo. Niejanaga matunda, kandi na iri na ndawa. Mpindi cia kuuma kiri Mukinduri niciumagira kuthithia bio-diesel. Factory niambitura Narumoru iria ithithagia bio-diesel iji.

Baita iji na ingi inyingi ndene ya TIST nigwikira arimi bangi babaingi moyo jwa gutonya TIST. Turi tayari kutonyitia, kuritana na kugaana umenyo na jaria twonete nabo.



TIST ndene ya Igembe: turi nthumba gatigati getu twingwa na amwe tukathithia jangi jamaingi.

Ni Joseph Gituma - 0724317200

Muradi jwa TIST nijugwita na mbele kunenena ndene ya Igembe. Arimi babaingi baria betire, bathoma kana baigua kwegie gukurukithua na gwitikirua gwa TIST nandi bari na moyo jwa kuanda miti ingi. Arimi, baria betire mamburene ja arimi ba TIST naria Gitoro Conference Center ndene ya Meru tariki ithatu mweri jwa itantatu mwaka juju, nibaturetere into bibingi biakuthoma na birina mantu jegie TIST. Kairi, nitwitite na mbele kuthoma gatheti ya Mazingira Bora iria ituretagira mantu na igaturina.

Nandi, nitwikirite cluster cietu inya. Abangiri ba mantu ja ntuura nibakurita ngugi na atongeria ba cluster, aritani na Atari miti kurtirira arimi ngugi. Ntuura injeru nicikwenda gutonya TIST niuntu bwa bou. Iji ni Mutuati na Matiandui.

Arimi bangi nibakwendelea gutonya ndene ya cluster inkuru ta Kawiru MCK na Antubuchiu. Kiri gutarwa kwa miti, ikundi ikumi na bithatu nibiumbitie gutarirwa miti kuuma mweri jwa mugwanja mwanka gatigati ka mweri jwa inana.

Ripoti cia cluster cia o mweri nicigutethia arimi kugaana na kuritanwa. Arimi nibaritani kwegia urimi bubweba na bamwe nibagutumira bu. Arimi bamwe nibakugeria urimi bubwega kiri imera biria bitigagua uumo ta myua, ugimbi na mianga. Babu ni mono guntu kuria kuri gukuumo ndene ya Igembe naria mbuura itietergwa.

Nitugwikanira moyo kuanda na urimi bubwega na kinya kuanda imera biria bitigagua uumo. Na njira iji, tukomba gucia irio rionthe na kinya kwona bia kwendia.

Ripoti cia cluster: Gaana jaria umbite kuthithia nikenda wikira TIST na Cluster yaku inya.

Ndene ya TIST nitugiga inya gukurukirakujukia matagarai twinthe na kugaana nabtu jaria tuumbaga nabangi ndene ya ikundi bietu bibinini, cluster cietu na nkuruki. Ripoti cia micemanio ya cluster na cia utumiri mbeca cirri na bata mono kiri kuumbana gwetu kiri mantu.. O cluster irina ngugi ya gucocka ripoti ya mucemanio jwa cluster nay a utumiri mbeca na mathaa ndene ya clustero mweri.

Uria umba gutuma ripoti ya ubangiri bwa cluster bwa mbeca na bwa micemanio gukurukira ntumwa ya thimu

Weru na gukarania ni mantu jaria jekiri nkuruki ni TIST. Cluster yonthe ya TIST no mwanka icolie ripoti ya uria itumagira Magana kenda jaria jabangairwa nikenda yumba kuthithia mantu jamanene. Ndene ya mieri iiri, TIST nithirite igumagira njira injeru na imbutu nikenda cluster ciumba kuuga uria batumirite mbeca iria cibangiri cia mweri na ripoti ciegie micemanio yao ya cluster bagitumagira ntumwa cia thimu. Njira iji nigwitikiria mumemba wa TIST gutuma ntumwa ya thimu kuuma thimune yawe igeta namba imwe inthure. Ntumwa cia thimu nicijukagua na cigategerwa ni ofisi ya TIST. Cluster ikethirwa nigukinyira Palm igwita ngugi, niibati gutumira fomu cia ripoti cia micemanio na cia utumiri mbeca bwa cluster ndene ya palm iu. Indi-ri, na njira iji njeru, cluster nicibati kuandika ripoti o mweri. Njira iji niinyagia ripoti cia arungamiri cluster na igatethia ofisi ya TIST kugwata mantu ja cluster mbaru.

Cluster ikumi na imwe nicithithitie ngugi inthongi mono kiri kuandika ripoti cia micemanio ya cluster. Igwanjau, Murinya, Ichuga, Kamuthanga, Miamoja, Tunyai, Matanya, Manyatta, Muriru, Matakiri na Chemaner

niciatumumiri o cluster ripoti cia micemanio ya June na July. luster mugwa nya niciathithirie ngugi inthongi mono kiri kuandika ripoti cia utumiri mbeca bwa cluster ciao. Iji ni Ankamia, Igwanjau, Kagaene, Kiahuko, Kiirua, Limoro, Matanya, Mikunduri, Muriru, Ntrukuma, na Pondo. Cluster iria nyngi niciatumire ripoti ciao, indi cluster mirongo itano na ithano itatuma. Twarega gukinyirwa ni ripoti iu, ofisi ya TIST no ithuganie cluster yenu kaikuite. Kwou, butikinyirwa ni mbeca iria bubangirite, Atari miti kana kanya ga kuthoma na kugaana ndene ya semina. Turitanirieni ngugi kiri kugaana ripoti cietu na kuumbana gwetu o mweri!

Wenda kumenya mantu jangi jegie kuripoti, ona murungamiri wa cluster yenu kana mubangiri wa mantu ja ntuura yenu.

Kurikanua: Nikenda cluster yenu yuumbana, o mweri niibati:

- 1) Ita mucemanio jwa cluster yaku o mweri na urikanie ikundi bingi gwita.
- 2) Tegereeni mantu jaria cluster yenu yumbite kuthithia: miti iria yainditwe, ikundi biria bitariri miti na uria mbeca cia cluster ciatumirwe
- 3) Tumeni ripoti xia micemanio ya cluster na utumiri mbeca ni cluster na Palm kana na ntumwa ya thimu
- 4) Banganieni utei miti na atari miti. Menya ati mutu wa cluster yenu nagutethia kiri utei miti bunthe!
- 5) Iteni acore na aturi gutonya TIST kiri micemanio ya cluster. Gaana gatheti iji ya Mazingira Bora na batethie kujuriria fomu cia gutonya.
- 6) Thithieni mantu jamanene nkuruki! Andeni miti, akeni kana bugure riiko ria gutumira nkuu inkai, thithieni urimi bubwega. Amwe twomba jonthé!



Amwe, nituthithagia nkuruki niu gikundi gia TIST kia Umoja 2005 gikuuga.

Ni Virginia Wairima

Batwi, Umoja2005 TIST Small Group, twatonyere TIST mwaka jwa 2005. Namba yetu ya TIST ni inini 2005KE510.

Mbele ya gutonya TIST gikundi gietu kiaandikithitue ndene ya ofisi ya thirikari ya mantu ja antu. Kuuma riria twatonyere TIST nituritite ngugi inyingi ya gutethania kwambiria minanda, gwaka mariko na kwegie urimi bubwega, nituthuranirite

miunda yetu niuntu bwa mbura iji ijite.

Nitukubanga kwambiria gwika mburi na nguku nikenda tuumba kuneneyia arimi tugwita mbeca. Nitukubanga ati mumemba umwe wetu akaewa riiko kiumia kiu kijite. We want to encourage other small groups to work together and gain more in TIST. nitukwenda gwikira inya akundi bingi bibinini kuritaniria ngugi na kujukia jamaangi kuumania na TIST.

Niatia tuumba kurua na mianki ya miitu?

Kumenyeera kanini gugatethia mono!

Ni Ben Misleh

Mwanki ni gintu gituuraga o na juthimiri nojuthongomie muthetu na thiria ya muti. Indi, mwanki nojwithirwe juthuki kiri miitu na kiri antu jwarega gwika na kithimi kiria jubati. Ta amemba ba TIST, nitubati kumenya mantu jaria jatumaga mianki na uria tumba kuniyia kanya ga mianki iminene na ekwinyangia iria yuraaga miti.

Kuri na mianki iiri ya miitu. Jwa mbele ni mwanki jwa nthiguru. Mwanki juju jaria maingi nijutambaga mpara na jutithagirwa jwingei. Juju jwatethia kurita ithaka, nyaki na imera biria bikuite. Nontu mwanki jwaju jutiingei, jutigaga irema bibinini gitinene kia muti, na gikonde nikirigagiria muti. Guku ni kuuga mwanki jwa nthiguru jutiuraga muti.

Riria mwanki jwa nthiguru jwaingiyia mwanki mono kana jwatambanga jwomba kua mwanki jwa biang na mathangu. Kiri mwanki juju, mwanki nijutambangaga gukurukira mathangu na biang'i. Mwanki juju nojwithirwe juthuki mono kiri miti nontu niuraaga mathangu jonthe ja miti na ikooraga biang'i na tuang'i tutunini. Gukua kwa bibi nigutumaga kubua kwa muti gukooma mono nyuma ya mwanki.

Matagaria jamakai jamothu jaria jatethia kumenyeera ati miti yaku itithukua riria mwanki jwakana mwitune jwaku ni:

- 1) Anda miti ugitaranagia na meter ijiiri ja uria wathi (kana nkuruki!). bubu ni bumwe bwa mantu jaria jarina bata na jaria mothu jaria umba kuthithia nikenda webera mianki iminene
- 2) Giita biang'i biria biri nthi, mono biria bikuite, kuuma kiri miti na urite miti iria ikuite buru. Kairi, biangi na miti ikuite niejaga mwanki kanya ga gukinyira mathangu na biang'i na mwanki

jukaingia. Menyeera ati nukurita biang'i biria uitaga amwe na jangi jaria jaguite jongwa kuumania na mwitu. Mati mwitune no jatumange mwanki jugukari jwa nthiguru jukaa jumunene juria jukathukia miti gukurukira kuthukia gitina na miri iria iri akui na muthetu jwa iguru. Oja nkku cia miti imikuo na wone baita ya kwebera mwanki jwa mwitu na kinya nkku.

- 3) Thithia antu a kuthiria mwanki na njira ya gutiga twanya gati gati ka laini cia miti, indi riria ukaanda mwitu jumweru, no wende kurega kuanda miti imikai nikenda ukanyiyia kanya ka mianki gukarika. Guti ithimi bieki bia kanya ga kuthiria mwanki, na ti mwanka twanya tutu twithirwe turio. Ngugi ya twanya tutu ni gutiga kanya karia karina mati kana miti iria iakanagia mwanki nikenda mwanki jutiraakane.. Riria mwanki jwakinya antu aja, mwanki jukathira na aria gutigeere gutiithua.

Riria ugutiga twanya tutu, aka kulingana na uria antu au gukari. Tiga kanya gatina gintu kagitenie kibari indi ti gaititie na kenami kibari. Mianki jaria maingi itambaga ititie kibari na ibarine bibiraja niineneangaga kuuma mianki ya nthiguru iminini ikaa mianki igutambanga ya mathangu na biang'i. Mwanki nijwingiaga na jukomagia mati na miti ruguru. Mati na miti iji riu niakanangaga mwanki jwamikinyira. Nontu bwa bubu, kurina bata mono kuthithia jaria jonthe tuumbikia kwebera mwanki ibarine O antu arina gintu kiria gitumikia mwanki mwanya na anga, na njira mianya no itumirwe guntu mwanya. Aria na muturi waku nikenda umenza mantu jaria bakuthithia kwebera mianki iria inyangagia.

Mazingira Bora



Kikuyu Version

An Environmental, Sustainable
Development and Community Forestry
Program.



TIST Quantifiers in a recent seminar at Gitoro Conference Center, Meru.

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Guthagania na kurimira miti niguo ikure wega.

Mwandiki; Ben Misleh

Gitumi gia gutagania miti ni guteithia gukura kwa muti uri wiki o hamwe na mutitu uri wothe. Uhoro uyu ukinyanagira na gucagura miti iria miega mutitu-ini. Kuri mithemba miangi ya miti iri hamwe na Eucalyptus, Grevillea na Cyprus iri niyo miti iria minene iria ikoorogwo iri mitungu. O muthemba niukoragwo na mabataro ngurani kuringana na kuria handitwo. Na tondu miti iria ihanditwo na mutaratara wa TIST ihandagwo na njira ngurani (muhiano iri ya kugiririria ruhuho) na kundu kuingi ngurani (muhiano irathiro ria Mt. Kenya kung'etheria thuiro ria Mt. Kenya) iri na ikiro ngurani.

Nigetha miti ikure wega na iri na hinya, utaganu wa 2m niwagiriire, utaganu uyu niwagagirira miti miangi na miti ingi niibataraga utaganu munenanene (maembe, macadamia). Gutagania miti wega kuheaga miti handu ha gwetha maii na unoru wa tiiri niguo miti ikure iri na hinya. Utaganu munini niwitikirikite miti iri minini. Na o uria irathii igikuraga noguo imwe iratunguha gukira iria ingi na niyo iria yagiriirwo nigutigio. Ugcagura mit iria igutigio rora kana nimitaganu wega.

Wamenya miti iria ukweheria, mitinie. Thutha wa ciumia cigana o una, niikwambiriria guthunduka. Niguo ndikanenehe, tinia mahuti macio marathunduka.

Njira njega ya kumenya muti kana niukweherio ni kuringithania na uria iriganitie kana niiiganaine na ikorwo yahanditwo rimwe. Ririkana ati miti niigutigana kuringan an muthemba wa tiiri na maai. Kwa uguo angikorwo miti irikundi kumwe niya ukuru uiganaine, iria minene yagiriirwo nigutigio. Njira ingi njega nikurora miti haria yakinyia uraihu, miti iria miraihu kuri iria ingi niihotaga gukinyirwo

ni riua na ikahota gukura wega. Muthia, miti yagiriirwo gukorwo itari na njahirira na itara na mirimu .no uu tikuga ati miti iria miraihu noyo yagiriirwo ni gutigio n muhaka ungitagania na utaganu wa 2m. Riria ureka maundu maya ririkana gukura kwa miti kuringanaga na mithmba ya miti. Muembe ungikuranira na mibau niyonekaga iri minini na igikura kahora no tikuga ati niwagiriirwo gutemwo tondu ni minini. Na ningi muembe ni muti wa matunda na niukoragwo na mawega maingi muno nigukoragwo na mawega mangi maingi ma miti kuringana na mithemba tiga kuruta carbon. Kwa muhianomutino ukorwo na kiruru kiega na kwa uguo muti ucio no uheo kahinda ga gukura wega na riua niguo mahuti maguo makure wega. Angikorwo urenda gukuria miti ya kugitira ruhuho no umihande na laini na ndukamitaganie muno. Guceha.

Mititu ya ki-nduire miti ni icehaga na mahuti makeguithia o mo mene. Riera-ini ria ki-nduirehonge iria nyumu na iria cibuthite niciguaga. Ona miti ya TIST igiicehaga nihakoragwo na bata icehwo na moko, ugcagura ruhonge ruria ugutinia niwagiriirwo kurumirira mawatho. Onamiti ikibataraga ucehi ngurani nihari mawatho maria magiriirwo nikurumirirwo.

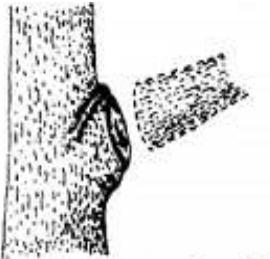
Miti miangi ndiagiriirwo gukorwo na njahirira na miti iria itari na njahirira ni ikuraga na ihenaya na ndingiguithio ni ruhuho. Riria miti iri na njahirira yatuika ya irio niwagiriirwo gucagura honge iria ugutigia niguo muti ndukabuthe ona hanini na irungare.

Kaundu karia gakoragwo kari ga kuhitithia nia ati wagiriirwo gutinia honge kuiganana na muti no



wagiriirwo gutinia ukirite hanini kuma hari muti na uu nikugitira kumana na kubutha na kuhotithia kugayania muti wega.

Ugiceha ndugacehe muno, mahuti namiti iria waceha m niihuthagirwo gwakia mwaki na kurio ni ngombe no ndwagiriirwo guceha biu niguo muti ukure wega na ihote gukinyira hinya wa riuwa. Watinia hau hatinio hatiagiriirwo kuhutio ndukahumbire na kindu niguo muti urute indo iria njuru kuhitukira hau na noyo njira iria andu mahuthagira kuruta giko. Kaundu karia kariganagira riria uratagania na guceha ni ati miti ni ithundukagira haria yacehwo na kubura



Pruning cuts should be made just outside the branch collar.



On a dead branch that has a collar of live wood, the final cut should be made just beyond the outer edge of the collar

mahuti macio ni uhuthu na matingimera ringi.

Miti miangi na muno ya matunda niirutaga maciaro mega riria iri na honge no no muhaka citinio muti uri munini niguo ikure iri na hinya. Honge ici njeru ciaumira

onacio niciagiriirwo ni gutaganio. Maundu maya magiriirwo nigucokerwo thutha wa mieri iigana o una.

Ririkana ati nigetha tuhote kuingira thoko-ini ya carbon twagiriirwo kureka miti ikure miaka itanyihire 30 na igicehwo na gutaganio wega niguo ithondeke mititu miega.

Mieke ya guteithia TIST.

Maundu manene nimakortwo magikika thiini wa TIST. Inyuothem nimuui ati turi "a mbere thi yothe" niundu wa certification ya wendia wa Carbon. Inyuothem nimuui ati nituikirite kirore uiguthanio na Kenya Forest Services. Inyuothem nimuui ati nitukoretwo tugitherema mienya yothe ya Kenya. Hamwe na maundu maya mothe mega, nihari na mieke ya arimi a TIST kuoya ikinya ria bata gutungatira na kwagirithia TIST thiini wa Kenya. Turacaria arimi aria mari na wendi wa guteithia mutaratarwa uyu wa TIST, aria makuhota kuruta wira na aruna angi, aria makwagirithia wira wa TIST na aria magutigirira ati arimi othe nimegira na mweke wa guteithika nan a wendia wa Carbon na mitaratarwa ingi ya TIST.

Muhuro ni mieke niundu wa kunyitanira na kwirutira. Iturwa cirote cikubatara mundu akorwo ari muruti wira, na gikundi giake gikorwo gikirutira na monanie values cia TIST miturire-ini yao aria makuheto wira uyu makuruthania na kanju ya utongoria na angi aingi nniguo gutigirira TIST ni "Low Budget - Big Results" kwa uguo caria maundu-ini maya wone kana kuri undu uri na ritana riaguo.

- Coordinar ngwataniro na Catholic Relief Services na honge ingi cia Microfinance.

- Kunyititira gutherema kwa TIST thiini wa Mbeere,
- Gutuika umwe wa andiki a Mazingira Bora
- Mucabi na mugai wa ngathiti ya Mazingira Bora
- Coordinator wa uthomithania wa matura.
- Coordinator wa unyaniru mweru thiini wa Yatta, Mombassa na kuria TIST iri.
- Kwaramia mutaratara wa riiko ria ndoro kuhitukira Helped to Help.
- Cordinitor wa kugeria mariiko ma nduka.
- Coordinator wa Kilimo Hai
- Kwaramia mutaratara wa uhandi wa miti yakinnduire na PES.
- Murugamiriri wa wendia uria ukwaraniria na kamboni cia Kenya hari uhandi wa miti na wendia wa Carbon credits.
- Coordinator wa kanju ya TIST thiini wa cluster matura-ini

Nituamurite amemba atatu a kanju ya utongoria aria ni eru othe thiini wa TIST niguo mateithiririe kuhariria na kugeria aria makwamurwo kuruta wira uyu na kuiyuikia wira uyu nao ni: Mary Kathei - 0726283425, Purity Mugo at 07724119815 na Susan Kinanu at 07117212219. Susan akurugamirira aria makwiyandikithia kuma Meru na kuri gukuhiriirie, Purity kuma Mbeere, Kirinyaga na kuria gukuhiriirie



nake Susan ateithiririe Timau na Embu na kuria gukuhiriirie

Angikorwo niukwenda gukorwo uri umwe wa acio no waranirie na murugamiriri uria ugukuhiriirie. Kwandika SMS kana kuhura thimu nikuo kwagiriire

no nowaranirie na atongoria a Cluster yaaku na makinyie ndumiriri iyo kuri Mary Susan na Purity. Angikorwo uri na kiuria nowaranirie na atongoria a cluster yaaku.

Nikii kingituma nyende guthurwo mutongoria wa cluster yakwa?

Turi na cluster makiria ma100 thiini wa TIST, turi na mweke wakugia na atongoria makiria ma 300 o mwaka mathuritwo ni arimi na uu nikwonania uhoti uria turi naguo wa gutheremia TIST thiini wa Kenya.

Ningi nimweke mwega kuri mundu kiumbe tondu niukugia na mweke wa guthoma na kuagirthia kiheo giaku kia utongoria gwa kahinda ka mwaka umwe ahamwe na kumenya nagutomithio uhoro wigii macini iria cihuthikaga hari utari wa miti na kumenya biacara ya carbon wega na gutungatira arimi aria angi. Niukwigira mweke wa guthiii semina, kurutithania wira na Atari a miti ohamwe na kuhota gucerera ikundi ini thiini wa cluster kuona uria mararuta wira hamwe na uhoro wa riiko na mithemba miangi ya miti.

Gukorwo uri mutongoria wa cluster ni kuruta

wira na kio guceerera ikundi nini thiini wa cluster kubataraga ukorwo ughithii kundu kuraihu na kwaria muno na kwirorera. Kuiga rekodi cia uruti wa wira wa cluster nikubataraga kahinda kanene. Kuhariria marihi onakuo ti kuhuthu. Guthoma kuhuthira mutambo wa computa na GPS na kuhariria githomo na micemanio ya o mweri ni wira. Ota uria muui, wathii semina ya TIST niugukorwo na mahinda mega no makiria wira ni muritu na wira wa kuruta wacoka mucii ukoragwo ho.

Kwa uguo wagiriirwo nikwiririria guthurwo ta mutongoria wa Cluster angikorwo niukwenda guthoma na wirutire kuruuta wira nahinya gutungatira cluster yaaku. Angikorwo uri na maundu maya, na uthuurwo, noukorwo ari kiambiriria kia maundu mega thiini wa TIST, tua itua.

Gicigo gia TIST kia Lamuria: Arimi magithomithia Arimi.

Mwandiki; Joseph Thitai.

Gicigo kia TIST kia Lamuria gikoragwo na cluster ikumi na nicio; Kiahuko, Male, Matanya, Thome, Muhonia, Mweiga, Weru-ini, Sweetwater, Kamangura na chuma. O cluster niicemanagia o mweri handu haria andu othe mangihota gucemania.

Gwa kahinda gaka cluster iria ciri na ithurano cia uthongoria kuria marathura mundu wa mathabu niguo nake uria urari wa mathabu atuike munini wa mutongoria nake munini wa mutongoria atuike mutongoria.

Arimi nimetikitie njira ino ya utongoria muno tondu o murimi ari na kahida ga gutongoria na gutiri mundu ukuaga murigo wa utongoria ari wiki.

Imwe cia cluster icio nicikoretwo cikirima Kilimo

Hai thiini wa plot ya kionererria. Plot ici niciteithagiriria arimi guthoma urimi uyu.

Gicigo-ini giki, kuhitukira micemanio ya cluster, arimi nimarathomithania uhandi wa miti kundu kumu o hamwe na ungania wa mbegu na gucithondeka ngiya ihinda ria kumera.

Miti iyo nita; Accacia, Miringa, mibera, Mikinduri na Muthiga niirahota gwitikirika. Mutu ino niikoragwo na mawega mangi tiga kuruta carbon, niikoragwo na matunda kana dawa. Mbegu cia mukinduri nicirutaga maguta madiesel na kuri na factory yambiriirio ya wira uyu Narumoru. Mawega maya na mangi maigi nimarekira arimi hinya na wendi wa kungira TIST. Nituraingiria na guthomithia arimi thiini wa TIST.



Gicigo kia TIST kia Igembe: nitutungatanagira na turihamwe tukahotana.

Mwandiki Joseph Gituma

TIST niithite na mbere na gukura thiini wa Igembe. Arimi aria marikuo, makiigua kanamakona TIST ikiheo Validation And Verification nimagine na hinya wa kuhanda miti miingi. Arimi, aria mari kuo ukunguiri-ini kuria Gitoro Conference Center Meru weri 3/06/2011, nimatureheire maundu na indo cia guthoma. Na ningi nituthiite na-mbere na guthoma Mazingira Bora iria ituthomithagia na igatukinyiria mohoro wega. riu nitwikirite cluster hinya. Coordinator aria mararutithania wira na atongoria a cluster athomithania na Atari a miti niguo, icigo ingi nicirenda kuingira na nicio Mutuati na Matiandui.

Arimi angi nimaraingira cluster iria iri kuo ta Kawiru MCK na Antubochio.

Hari guitarirwo miti, ikundi 13 niciratariirwo miti gatagati ka July na August mwaka uyu.

Micemanio ya o mweri niirateithia githomo. Arimi nimathomithitio uhoro wa Kilimo Hai na mangi maingi. . arimimangi nimararima CF indo iria ikuraga kundu kumu na nicio Muhiawele na mianga. Kundu guku nita Igembe kuria mbura iri nini.

Niturekirana hiya turime CF nakuhanda irio iria citomaga na ihenya na twathii uguo nitukwirugamirira.

Uhoro wa cluster: Cenjaniai utoria niguo mukure na hinya.

Thiini wa TIST, nitugiaga na hinya riria twaraniria na twerana uria tuhotete na ikundi ingi thiini wa cluster na nja. Rifoti ya mweri ya cluster ya micemanio na mathabu ni ya bata hari maciaro mega. O cluster no muhaka yandike rifoti ya o mweri ya micemanio na mathabu.

Uria wagiriirwo ni kwandika rifoti ya mathabu na micemanio na sms.

Utheri na uigiririki nicio values cia bata thiini wa TIST. O cluster no muhaka yuge uria yahuthira 900/. Gwa kahinda ka mieri iiri, TIST ikoretwo ikihuthira njira njeru cia kwandika rifoti cia o mweri cia cluster kuhitukira ndumiriri ya SMS. Njira ino irahotithia arimi kwandika SMS kuma thimu-ini ciao na cigathomwo ni aruti wira a TIST na angikorwo cluster iri na palm noiilhure fomu ya Cluster Meeting and Accounting .na njira ino njeru, o cluster niyagiriirwo nigutuma rifoti o mweri. Njira ino niirahuthia wira wa arugamiriri a TIST.

Cluster 11 nicirutite wira mutheru wa gutuma rifoti na nicio; Igwanjau, Murinya, Ichuga, Kamuthanga, Miamoja, Tunyai, Matanya, Manyatta, Muriru, Matakiri na Chemaner ciothe ciatumire rifoti ya mucemanio wa cluster cia June na July. Cluster ingi 11 niciatumire rifoti ya uria cihuthirite mbeca cia mieri ya June na July na nicio; Ankamia,

Igwanjau, Kagaene, Kiahuko, Kiirua, Limoro, Matanya, Mikunduri, Muriru, Ntrukuma, na Pondo. Cluster nyingi niciatumire rifoti no cluster 55 cititumite. Tungiaga kwamukira rifoti kuma kuri cluster aruti wira a TIST nomecirie cluster yanyu ndituraga na mwage kwamukira marihi kana guitarirwo miti kana gwitwo semina. Nitutume rifoti ciitu niguo tumenyé aria angi uria mareka o mweri.

Niundu wa uhoro makiria wigii rifoti, araniria na arugamiriri aa Cluster kana coordinator wa kwanyu. Kiririkania: niguo kugia na maciaro o mweri cluster yaaku yagiriirwo ni:

- 1) Guthii micemanio na kuririkania aria angi mathii.
- 2) Kurora maria muhotete: miti iria mieru muhandite na iria itaritwo na uria muhuthirite mbeca.
- 3) Tuma rifoti na SMS kana Palm
- 4) Hariria guitarwo kwa miti na Atari na utigirire hari mundu kuma cluster yanyu urateithiriria.
- 5) Rehe arata aaku na aria murigainie micemanio-ini na umahe Mazingira Bora na fomu ya kuingira.
- 6) Giai na maciaro mega! Handai miti, thondeka kana ugure riiko ritakuhuthira mwaki muingi na urime Kilimo Hai. Turi hamwe gutiri kindu tutangigia.



Turi hamwe nituhotaga gukinyira maundu manene niguo gikindi kinini kia Umoja2005 kirauga.

Mwandiki; Virginia Wairima.

Ithui Umoja2005 twaingirire TIST mwaka wa 2005. Namba ya TIST iitu ni 2005KE510. Mbeere ya tuingirite TIST, gikundi gitu nikiadikithitio na Ministry ya Social Services. Kuma tuingire TIST nitukoretwo tugiteithania hari kwambiriria tuta ohamwe na urimi wa Kilimo Hai na riiko ria kuhuthira hinya munini. Arimi aingi a gikundi giki

nimararima Kilimo Hai kimera giki, na nituhariirie migunda iitu niundu wa kimera kia mbura. Nitureciria uria tungianjiriria kuriithia mburi na nguku na nitubangite kuh murimi umwe riiko kiumia giukite. Nituroria ikundi ingi cirute wira hamwe niguo citeithike thiini wa TIST.

Tungirua na mwaki wa githaka atia? Kigiririria kinini.

Mwandiki; Ben Misleh.

Mwaki niwa ki-nduire na no wongerere unoru wa tiiri na ona kuri o uguo mwaki ti mwega na mutitu hamwe na andu ungirema kuhoreka. Turi arimi a TIST twagiriirwo kumenya uria tunginyihia ugwati wa mwaki uria ungithukia miti.

Kuri mithemba iiri ya mwaki wa githaka. Wambere ni wa gucina thi uria utagwataga na ihenya na niuninaga mahuti ma thi na indo iria ikomete thi. Na tondu urugari waguo ni munini, nducinaga muno miti na uu nikuga mwaki wa thi ndungiuraga miti. Mwaki uyu ungitamba na-iheya na uhiuhe no utuice mwaki wa iguru. Mwaki wa iguru utheremagira mahuti-ini ma iguru ma miti na nimuru tondu no urage miti kuhitkira gucina mahuti ma miti na honge. Gucina mahuti nigutumaga miti iremwo ni kuhona kumana na mwaki.

Makinya manini mahuthu nomatigirire ati ona mwaki uncicina mutitu nduguthukia miti.

- I) Handa miti yaaku na utaganu wa 3m niguo ugitiire ugwati uyu. Njira ino niinyihagia mwaki gutherema na-inhenya tondu mahuti ti maingi. Mwaki-ini, mahuti momu na honge nyumu nicio ciongagirira mwaki nginya ugakinya iguru.

- 2) Tinia mahuti mamiti maria mari thina maria momu biu na wamatinia umeherie mitiini na indo iria ingi cingikorwo ciiguititie. Mahuti maria matigarite namaria meguihititie nomakorwo na ugwati munene muno hari gutheremia miaki.
- 3) Nyihia gutherema kwa miaki na gutagania miti ukihanda, ndugateme miti iria uhandite niguo ukorwo unyihitie ugwati. No riria urahanda miti tigirira niwatagania. Gutikoragwo na gikiro gia kunina mwaki no to muhaka utigie handu ha kunina mwaki. Bata munene wa kio ni kunyihia ugwati tondu mwaki wakinya haha hatari na miti no guthira uguthira. Ugitigia handu hakunina mwaki thondeka uria mugunda uikaire na utigie handu karima-ini. Mwaki utheremaga karima-ini na kuria kuri na iharuruka. Mwaki wakundukianda-ini uhiuhaga na ukaneheha wa karima-iniana mwaki ukaneheha.

O handu nihari ugwati waho wa gutheremia mwaki na njira ngurani nocihuthirwo kunyihia. Araniria na aria muriganitie umenye uria magitagira mwaki.

Mazingira Bora

TIST

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

Kikamba Version

An Environmental, Sustainable
Development and Community Forestry
Program.



TIST Quantifiers in a recent seminar at Gitoro Conference Center, Meru.

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Kwa vamwe nituukwata vaita mwingi. Niw'o Umoja 2005 TIST small group mekwasya. Page 6



Kutaanisya na kusea miti yaku yiane nesa.

Kwa indi, kitumi kya kutaanisya na kusea miti ni useo wa uima wa kila muti, na kwa useo wa uima wa mutitu w'othe. Undu uyu wikawa kwa kusakua miti ila miseso thini wa mutitu. Kwi mithemba mingi ila ni ta Misanduku, Mikuvulya na Minyoonyoo ino ni miti mala maingi yithiawa yi minene, na yina muthamba umwe (iteni ngava). Kila muthemba wa muti niwithiawa na mawendi kivathukany'o nikana wiane kwa mituki na wina uima museo. Kwongeelela ni kana miti imwe niyithiawa iyenda usuvio kivathukany'o na ila ingi kwianana na vata wayo kana vala ivanditwe. Yila miti ivanditwe ta ya uimi wa muvango wa TIST ni ivandawa na nzia syi kivathukangany'o (ngelekany'o ni miti ya kusiia kiseve muundani) thini wa isio syi kivathukany'o (ngelekany'o ta w'umiloni wa sua kiimani kya Mt. Kenya na uthuilono wa sua kiima kiu kya Mt. Kenya) na kivathukany'o kya seve na mawendi amwe ma miti uyithia ni mavwanene.

Kwa miti kwiana na ulumu yi na wailu matambya eli (2metres) ni maile kwa utaaniu wa miti. Kutaaniw'a kuu kwa miti kaangi ni kwailaa kwa miti ila ivanditwe ni TIST imwe yayo yi ta mithemba ya miti ta, misanduku, mivengele na mikuvulya kana minyoonyoo. Tulilikane kana miti imwe niyendaa utaaniu munene kwi ingi ta iembe na ikandania. Kutaanisya miti nikutumaa miti itonya kumya liu na kiw'u kuma muthangani nesa vatekuaania, undu uu nutumaa miti yiana muvaka kiwango kila yaile. Miti ithenganie niyaille miti yi minini indi miti yaendeea na kwiana niw'o miti imwe niyithiawa yi minene na uthui mwangi kwi ingi. Miti ino niyo yaile kuekwa ikeana ("crop tree"). Thini wa kuamua ni muti wiva ukuvetwa na niwiva ukutiwa niwaile ni kusisa kana mwanya ula wi katikati wa miti isu kana niwaile, ethiwa ndwianie niwailwe ni kumya miti imwe.

Itina wa kusakua miti ila ukumya, mitilile vaaya nthi, mithenya yukite kitina kiu nutonya kwona kithongoote, nikana thongoo isu iikaendee kwiana niwaile kuitila ingi kuma kitinani.

Nzia imwe ya kumanya kana kusakua muti ula ukuveta ni kwa kusianisya undu muti wiana kwianana na miti ila ingi yavanditwe imwe. Elewa kana miti yianaa kivathukany'o kwianana muthemba wa muthanga, undu kiw'u kiana na vuu. Kwa vamwe, ethiwa miti ila yi vamwe ni ya ivinda yimwe miti ila minene niyo yailwe kuekwa ikena muvaka kuima "crop trees". Kingi kitonya kutuma muti withiwa wi mwailu ni undu wina matu maingi kana tukava

vala tui. Muti wina matu kana tuukava kuu yiulu withiawa utonya kwosa kyeni nesa na kwi miti ila matu me itheo na nitonya kwiana nesa. Mwisoni kana muti wa kuima "Crop tree" waile kwithiwa na muthamba /kitina kimwe, kitena uwau kana muinyu. Onavala kuu tikwasya miti yothe minene niyaille kumw'a lakini kieleelo ni vethiwe na mwanya wa matambya eli (2metres) katikati wa miti in kana miti ila imeaa na ngava mbingi yithiwe yimianie na yiane nesa na kwosa kwa seve ila itumiawa ni miti (carbon capture) kwithiwe kwa iulu.

Yila uutumia nzia ithi syi vaa iulu lilikana kana kwiana kwa muti kuendanasya na muthemba wa muti. Kethiwa muti wa kiembe ni wianite vamwe na musanduku, kiembe kithiwa ki kinini na kianite mbola kwi musanduku ula wianaa na mituki, niw'o ndutonya kutema kiembe kiu nikwithiwa ni kinini kwa kusisa. Niw'o muembe ni wavata nundu nutumiawa ta liu na ona kutwika wianaa kavola, na kwi miti mithemba mingi itumikaa maunduni kivathukany'o na ti kwa kwosa seve thuku tu(carbon capture). Ngelekany'o ni ta muti wa muunyi, muti uyu niwaile kuunenga mwanya munene nika wose kyeni na sua nesa nikana umesye mbonge na ngava mbingi kwa mituki. Ethiwa wienda miti ya kusiia seve nayo niwailwe kumivanda kwa musitali ithenganie nikana ithunge.

Kusea

Nthini wa mititu ya kwimesya, miti niyi sea yo mbene. Ngava ila syi yiulu nivithaa tuukava kana tuvonge tula twi nthi wasyo na matu ma mbonge syithi mayambia kuma na kwoa kila kitumaa nasyo mbonge/ngava isu syuma na kwoa na iyitila kuma mutini. Oyila kwisea kwa miti kutonya kwithiwa thini wa mititu ya TIST, nivaile vala ve vata na ni useo kusea na moko. Yila uutw'a /kuamua ni ngava/ mbonge syiva ukumya niwaile ni kuatia nzia imwe, nikwithiwa miti yothe ndiseawa undu umwe.

Miti mithemba mingi yailwe ni kwithiwa na muthamba umwe kuma nthi. Miti ya muthamba umwe niyianaa mituki na ndithiawa na thina wa kwatuka yila kwina kiuutani. Ethiwa muti wina mithamba mingi na niwasakuwa ta muti wa kuima "crop tree" ve syindu waile ni umanya ta muthamba ula munou/munene niwaile, na ndwaile kwithiwa wi mwou kana kwoneka wina matu maingi ni waile ithiwa wi mulungalu.

Kindu kimwe kyosawa nai nthini wa kusea ni

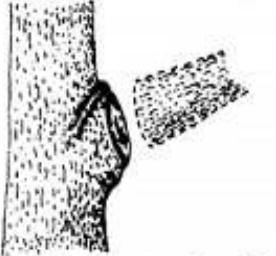


kana mbonge ila syianite vamwe na muthamba nisyale kutemwa. Uu ti w'o kutilwa kwaile kwa ngava ila yivaasa na muthamba. Kiikitumaa muthamba uyu waile wiana na kuvwika kitau kiu vate kwoa. Sisya visa ula uatiie.

Yila ukusea miti ndukasee na itomo ati nikwithiwa kaangi nitumikaa

ta ngu kana uithyo wa indo. Lilikana kana kusea nikutumaa miti yiana yina uima mwailu na ingi kwa ivinda ikuvi ikiana na mituki, kumya matu kutiaa muti utena vinya mwianu wa kwosa sua na kwoou uituma muti withiwa na thina wa kwosa sua na uyithiwa na kitau kila kyaile uvoa. Itina wa kusea vala wasea nivaile kuekwa vakavoa, ndwaile kuvwika kitau kiu kiikatume muti usu wambiia kwoa kana kulikwa ni sumu, nundu muti uyu uvoaa uta mundu atemwa.

Undu ungi ni kana muti wasewa vala vaumw'a ukava vambiia uthongooa ovau utee kwoou nuseo



Pruning cuts should be made just outside the branch collar.



On a dead branch that has a collar of live wood, the final cut should be made just beyond the outer edge of the collar

kutila thongoo isu itaneana kaangi iis Yokaa uthongooa ingi.

Miti imwe ta ya matunda niyikaa na kusyaa nesa yina ngava mbingi. Kwoo miti ino niseawa yi minini ngava ila syi vakuchi na muthanga nikana itonye kuthongoo ingi kuu yiulu na iyiana na mituki. Muti uyu wa mina kwiana wambii

kuthongooa ingi thongoo ithi noitilwe ni kana muti uyu withiwa na usyao museo na muti uthunge nikana usyae nesa. Ithiwa wisi niwaile unenge muti ivinda itina wa kusea mbee wa utana usea ingi nikana muti withiwe unavoaa itau na ukakwata vinya.

Lilikana kana thini wa soko wa seve thuku (Carbon market) nitwaisye nitwaile kwikalya miti vandu va ivinda iasa. Miti niyailwe ni kwiana na kwikala ta vandu va myaka ta miongo itatu.(30years). Tuisea na kuimia na kumitaanisa miti kwa useo wa myaka yukite.

Mavuso ma kutetheesya TIST.

Maundu manene nimaendee na kwithiwa thini wa TIST. Inyw'oothe ni mwisi "Kwithiwa mundu ewambee nthi yothe (Duniani) thini wa kunewa kikombe kya Kutumia seve thuku (Certification of Carbon Credit.) Ona ingi nimuumanya kana nitweekiie saii/kyaa kukwatana na uthukumi wa mititu ya Kenya (Kenya Forest Service). Aingi menu nimesi kana nituendee kuneneva na kukwatana na isio ingi kula ngwatanio ino ya TIST iendee na kuthukuma.

Vamwe na mauseo aya oothe kwina mavuso/ myanya ingi miseo kwa TIST thini wa Kenya. Tuendee na umatha ene TIST ala mena wendi wa kunenevy na kwiania muvango wa TIST, ala mekwenda uthukuma na ngwatanio ingi nzau, nikana tuthathasye wiko wa TIST vamwe na kuikiithya kana aimi ni makwata ivuso ya kutetheka ni seve thuku "Carbon Credits" na maundu anga ala me thini wa TIST.

Vaa itheo vena nzia imwe sya kwongeleela mavuso ma kutetheka ni walany'o na uthukumi wa TIST. Maundu aa othe mendaa mwene wa TIST ethiwe e muthangaau kikundini kyake na kwonany'a moseo na vata wa TIST thini wa mwikalile wa kila muthenya. Andu ala meosa mawia aya makathukumaa na nzama ya atongoi na ala angi kuikiithya kana TIST niyaendea kuthukuma na mbesa nini kukwata matunda maingi "Low Budget - Big Reults". Kwoou, sisya mothukumi ala mevo nauisisya ula utena mundu wa kwika noyinenga w'o

noiyiya "ii vaa nivo ndonya kutetheesya TIST".

- Kukwatany'a kikundi kya utethyo kya kanisa wa katholeki (Catholic Relief Services) na kila kya "Green Gram Project"
- Kukwatany'a kikundi kya utethyo kya kanisa wa katholeki (Catholic Relief Services) na kila kingi kyoo kya "Micro finance Project" SILC
- Kutwiika kwaama / kuthathaa kwa TIST thini wa Mbeere
- Kwithiwa wi umwe wa aandiki ma Mazingira Bora
- Munya na muua wa mathangu/mavuku ma Mazingira Bora
- Mumanyisa wa ngwatanio kisioni.
- Kwithiwa wi mukwatany'a wa isio nzau sya TIST ta Yatta, Mombassa na isio ingi.
- Kwaamya muvango wa maiko ma yumba mausuvia mwaki kwa nzia ya Kutethw'a utethye.
- Kutetheesya kwa kukwatany'a useuvya, kumbwa na kukunikila wailu wa maiko
- Kuseuvya nzia ya kutetheesya kuseuvya maiko kwa muvango wa kutethw'a utethye.
- Kuendeesya na kuthathasya uimi wa kusuvia (Conservation Farming, CF)
- Kuthathasya uimi wa miti ya kitene/kienyenji thini wa uvandi wa miti ya PES
- Kuthukuma ta mutandithya ("Marketing representative") kwa kuelesya kambuni thini wa Kenya iulu wa kuvanda miti na ndivi undu wa seve thuku "Carbon Credits".



- Akwatanithya na anzami maTIST thini wa ikundi na isio.

Nitunyuvite andu 3 eu kwa utongoi na unzami wa TIST kutethyeesya kukwatany'a na kwailya ngwatatio na andu othe mekwenda ukwatana na TIST withie no mamatetheesye kulika na ethiwa ni masakuwa, undu wa kuthukuma mawia moo meu.

Andu aya eu ni: Mary Kathei - Tel: 0726 283 425, Purity Mugo - Tel: 0711 981 5. Susan Kinanu - Tel: 0711 212 219. Susan nukwithiwa aisyaisya kunyuvva na kwikithw'a mutiani thini wa Isio sysa

Meru na isio ila imithyululukite. Purity ethiwa nae aithukuma wia usu thini wa Mbeere, Kirinyaga na mawithyuluko mayo, Susan nae ethinikia Timau, Embu na isio ila imithyululukite.

Kethiwa ni ukwendeeew'a kukwata uthukumi ta uyu, kwa ndaia tavya mundu ula umuungamie kisioni kyenyu. Utumani mukuvi na kukuna simu ni nzia nzeo, onakau no utavye/umamanyithye atongoi maku thini wa kikundi na nomavikye utumani kwa Mary, Susan na Purity. Ethiwa wina ikulyo kulya mutongoi wa kikundi kyenyu.

Niki nendeew'e kunyuvva ta mutongoi wa kikundi?

Twina ikundi mbee wa 100 thini wa TIST, twina ivuso/mwanya wa kwongeleela atongoi ta 300 masakuitwe ni ikundi syoo na ene TIST kwa vamwe. Uyu ni usengy'o wa undu ngwatatio ya TIST yianite na mituki thini wa Kenya.

Ingi ni ivuso iseo (mwanya museo) kwa ula walikile e weka thini wa TIST. Ula wasakuwa ta mutongoi thini wa kikundi (Accountability person, Co-leader, or leader) ena mwaka muima wa ukwata kisomo, kwimanyisa utongoi, na kusoma mbeange undu wa mijo ya utumia na utumii museo wa Kuvitukithya "Quantification" kuelewa iulu wa viasala ino ya seve thuku "Carbon Credit" na kuthukuma ala mevamwe namo thini wa TIST nesanga. Nimekwithiwa na ivinda kana mwanya wa kuvika seminani, kuthukuma na avitukithya (quantifiers) andu ala angi mekwithiwa mathokete thini wa TIST na tukundi tula twi thini wa ikundi kwoneka maitwaiisa winany'o wa undu methiitwe mayika thini wa ikundi na tukundi, kuvundianya iulu wa kumbana, kuseuvya maiko maseango mbee, na kumanya useo na vaita wa miti na momanyisyo angi

maingi.

Wi mutongoi nonginya uthukume muno. Wia nutonya kwithiwa wi mwingi ta kuthi kutembea kula kwina tukundi tunini, kuneenany'a namo, kusisa na kuvundiany'a. Kwia mayuku ma undu mwikite ni kwendaa masaa na kwithiwa mundu athumuite. Kusisa na kwona kana tukundi tunini thini wa TIST nitwaiwva kwa wia ula tuthukumite. Kwivundisya kutumia computer ya ukwata na kw'oko, GPS, mitambo ya utunga livoti, na kwalany'a iulu wa kuvundisya kwithianu na kwithiwa na mbumbano sya kwendeesya kila mwai, na uu w'othe ni wia muto. Ta undu aangi menyu mesi wathi wumbanoni wa TIST nonginya withiwe na ivinda iseo onakutwika nomuvaka uthukume na kithito, muthenya na utuku.

Kwoou thukuma na kieleelo kya kutwika mutongoi wa kikundi na utyithiwa na wendi wa kumanya mbeange na uithukuma nakithito, withiwe muthukumi wa kwendeesya ona kwa tukundi tunini. Kethiwa wina wendi uu na uisakuwa utongoesye kikundi nowithiwe wi mwambiiro wa myanya na mavuso maseo kwitu thini wa muvango wa TIST. Amua.

Aimi ma kisio kya Lamuria TIST kuvundisya aimi.

Ngwatatio ya TIST ya Lamuria yina ikundi ikumi ila ni Kiahuko, Male, Matanya, Thome, Muonia, Mweiga, Weruini, Sweetwater, Kamangura na Chuma. Kila kikundi nikikomanaa kila mwai na makomaniaa vala ni kati kwa kila umwe vala utonya kuvika na maaupi na ayinuka.

Thini wa ivinda yii ikundi nisiendee na usakuani kwiana na undu vaendaa nthini wa TIST kwa nzia ya kuvinduana. Ene kikundi nimataniaa undu uu wa utongoi wa kuvinduanw'a nundu itumaa kila muimi ethiwa atonya utwika mutongoi na tikutwika muio kwa mundu umwe.

Imwe katika ikundi ithi nisyambiie kwithiwa na Kilimo hai/Uimi wa kusuvia (Conservation farming"CF") thini wa isio syoo. Uimi uyu utetheeasya aimi kuseana na kwailanya thini wa nzia ila yaile ya uimi uyu wa kusuvia (CF).

Kisioni kii kya LAMURIA ikundi nisiendee na utethany'a na kuseana kwa nzia ino ya kukomana na kusomethany'a. Nimaendee na kwotaana iulu wa miti ila miseso kuvanda thini wa isio ila mbumu, na undu wa ukolany'a mbeu, undu mbeu itonya kuiitwa na kusuvia na kuseuvya kivuio. Nimaendee na umanyiany'a iulu wa nzia ila nzeo sya uvandi wa miti na kusuvia miti ya nguumo sya mbusi.

Miti ta miuuku, mithiia, ivakato, ivela, mbaiki na ingi mingi niiendee kwitikila ka wingi. Miti ina moseo maingi ta kwithiwa yi liu na matunda na ndawa ovamwe na kwithiwa iiveta nzeve thuku (carbon Credit). Ingi ta mbaiki nitumiawa kuseuvya mauta.

Aya mevaa iulu na aimi angi aangi ma TIST ni maendee naukulya andu aangi maendee na kulika ngwataniioni ino ya TIST, nimeyumbanitye kumavundisya ala mekwenda undu uu.



Ngwatanio ya igembe tist. “twi athukumi kwaithyothe na vamwe tuvikie moseo maingi”

Joseph Gituma

Muvango wa TIST niundee na kwiana thini wa kisio kya Igembe. Aimi aingi ala mokaa nimew'aa na kusoma undu kikundi kii kya Aimi ma TIST kiendee kwaila na manyendeew'a na kuthuthw'a kuvanda miti kwa wingi. Aimi ala mavikie kutanani kula kwa Gitoro Conference Centre Meru matuku 03/06/2011 nimookie na syindu mbingi sysa usoma na sysa utethyo kwa aimi ala angi. Nituendee na usoma ithangu ya kila mwai ya Mazingira Bora yila yithiitwe yi ya vata kwa masomo na umanyi.

Yu nituendee na kwikia ikundi vinya, kuikwatany'a ithukume vamwe na aungamii masyo, Avundisya na Amuui (Quantifiers) nikana tukwate kwiana . Aimi aingi nimakwatanite ki isio na nimekwenda kulika thini wa

ikundii namo ni Mutuati na Matiandui.

Aimi aingi ni maendee na kulika ikundini ila syivo ta kikundi kya Kawiru MCK na Antubochio. Ikundi ta 13 nisyithiitwe ivitukite (quantified) kwa ivinda yi kat iwa July na Mid -August mwaka uyu. Mbumbano sysa kila mwai nitetheesye aimi aingi kukwata umanyi na kumanyisa angi iulu wa uimiwa kusuvia (CF) na nzia ila syaile sysa uimi uyu. Aimi amwe nimaendee na kutata undu uyu na liu umwe ula utew'aa sua ta muvya, mwee na manga. Uimi uyu muno uendee thini wa isio ila mbumu sysa Ingembe kula mbua itauaa nesa

Nituthuthanasya kila umwe akatate uimi uyu wa uimi wa kusuvia (CF) na kuvanda liu ula utew'aa sua, ta nzia imwe ya kutuma twikala twina liu wa kutwiania.

Kutunga livoti kwa ikundi na kuaia ala angi undu mwikite nikana mukethiwa na maendeeo na kutuma kikundi kyenyu kithiwa ki kilumu thini wa TIST.

Thini wa TIST nitwosaa vinya yila tuuthukuma vamwe ona kukusiia/kutavya angi sili ya maendeeo thini wa tukundi na ikundi ila twithini wasyo. Kutunga livoti kila kikundi na kukomana/ kumbana and kusisa masavu ni kindu kimwe kya vata kwa kuendea nesa kwa kikundi. Kila kikundi nikikwataw'a kutunga livoti ieleeka na yitikilika kila mwai.

Undu wa utuma livoti ya kikundi kila mwai kwa nzia ya utumani mukuvi wa simu (sms).

Uiikiku na kwitikilika kwa masavu ma kinandu ni kilio kimwe kya vata muno thini wa ngwatanio ya TIST. Kila kikundi kithini wa TIST kikitalikaa kwa kutunga livoti undu kitumiite Ksh.900/= kila mwai. Thini wa myai ili mivitoku TIST niyithiitwe iitumia nzia ya mituki ya kutunga livoti iulu wa masavu na uthukumi woo vamwe na kila mavitukithya kila mwai thini wa kila kikundi. Nzia ino itumaa ene kikundi methiwa matonya utumani mukuvi kwa simu syoo kuthi simuni ya kat i ya ngwatanio ya TIST. Utumani uyu ni wosawa na uikunikilwa ni athukumi ma TIST. Etiwa kikundi nikithiawa na Working Palm, ni mailwe kutumia Mavuku ma yilamakomana na mathangu / forms sysa masavu thini wa Palms. Ona vala thini wa nzia ino nzau kila kikundi nikitungaa livoti kila mwai, Na nzia ino niuvuthasya wia wa kutunga livoti iulu wa kikundi.

Ikundi ikumi na kimwe nisyikite nesa mbee thini wa kutunga livoti, Ithi ni:- Igwanjau, Murinya, Ichuga, Kamuthanga, Miamoja, Tunyai, Matanya, Manyatta, Muriru, Matakiri na Chemaner kila kimwe nikitungite livoti ya mwai wa thathatu na wa Muonza. Ikundi ikumi na kimwe nisyatungie livoti undu itumiite kinandu

kyasyo thini wa mwai wa Thathatu na Wamuonza, nasyo ni:- Abkamia, Igwanjau, Kagaene, Kiahuko, Kiirua, Limoro, Matanya, Mikunduri, Muriru, Ntrukuma na Pondo. Ikundi mbingi nisyu tumie livoti lakini ikundi ta 55 sysy iyaa isa utuma livoti ona imwe. Ithiwa tuiukwata livoti ona imwe athukumi ma TIST nomone ta mwaekie uthukuma kana tamwooae kikundi, Na yila vekala uu mwikwataa utethyo wa kinandu kana kutumiwa andu ma umumayisa. Tuthukumei vamwe tuendeesye undu uu kwa nzia ya kutunga livoti.

Winda uvoo mbeange neena na ula uungamie kikundi kana kisio kya kindundi.

Lilikana kana nikana twithiwe na kuendea nomuvaka kila kikundi kitunge livoti.

1. Enda mbumbanoni sysa ikundi na ililikany'a ikundi ila ingi.
2. Sisyai livoti ila mukwatite iulu wa kuvanda miti myeu, asyaiisya maikundi, undu kinandu kyatumiiwe mwi vamwe ta kikundi.
3. Tuma livoti na Palm kana utumani mukuvi wa simu (SMS) iulu wa kumbana na kinandu kya kikundi.
4. Vangithya kusyaiwa na kuvitukithwa kwenyu ni asyaiisya (Quantifiers). Ikiithya mundu umwe kuma kikundini niwatetheesya thini wa iseso yii.
5. Thokya anyanya na atui thini wa wumbani wenyu wa kila mwai wa TIST. Manenge ithangu ya Mazingira Bora masome na uimatetheesya vala mena vata nikana withie no makwatane na kikundi kyenyu kana TIST.
6. Seuvya mosungio manene kwa kuvanda miti , kuseuvya maiko mausuvia mwaki, na kutata uimi wa kusuvia (CF).

Twi vamwe Vaiundu utuema.



Kwa vamwe nituukwata vaita mwingi. Niw'o Umoja 2005 TIST small group mekwasya.

Virginia Wairima

Ithyi ma kikundi kya Umoja 2005 TIST nitwalikanile na ngwatatio ya TIST mwaka wa 205 na number yitu ya kikundi ni Small 2005KE510.

Mbee wa kikundi kii kukwatana na TIST kyai ungu wa Ministry of Social Services. Kuma yila twakwatanie na TIST nituthukumite muno na kutethanya ithyi kwa ithyi thini wa kuseuvya ivuo, kuvundianya kuseuvya maiko ala masuviaa mwaki,

na uimi. Aimi aingi maitu nimethiitwe maitumia nzia ya uimi wa kusuvia (CF) onatayu tweteele mbua.

Twina muvango wa kuthathasya ukwati witu kwa kwambiiya kuithya mbui na nguku. Tuendee na kuthuthya aimi ala angi mena tukundi tunini makwatane vamwe na kwikiana vinya nikana matetheke thini wa ngwatatio ino ya TIST.

Nata tutonya kikitana na mwaki wa mititu? Kusilia kwa kunini nikuendaa nzia ndasa.

By ben msleh

Mwaki niundu wukaa nduetawe na ethiwa nuusuviwa nitonya kuete unou wa muthanga ula uetae unou wa miti. Onakutwika mwaki nutonya kithiwa wi muthuku kwa mutitu na wimuisyo kwa andu ethiwa nduuusushiwa. Ta ene TIST, nitukuelewa kila kyambiia mwaki na undu nutonya kukiola na undu tutonya kusuvia mwaki ndukoae miti.

Kwi mithemba ili ya mwaki wa mititu, wa mbee ni mwaki wa Nthi. Mwaki wa nthi nuendaa kavola na withiawa na uvyuvu munini. Mwaki wa nthi noutetheesye kuveta ikuthu ila ngw'u, nyeki na mavuti, nundu uvyuvu ni munini uvivasya ungu wa miti w'oka na ikonde ya muti niyisiiaa kumia kwa muti. Uu nikwasya kana mwaki wa nthi nduaa muti, mwaki wanhi wambiia kusemba na wavyuva muno nutonya utwika mwaki wa iulu na uyambiia kuvivya ngava, matu, na mbonge. Mwaki uyu ni muthuku kwa miti nundu wuaa matu na tuuvonge tula tuthongooaa undu uu utumaa muti onawalea kuvya vyu withiwa utatonya kuvoa itina wa mwaki kuvoa.

Matambya manini ala matonya utetheesya kusilia mwaki kuvivya na kwananga mutitu.

I. Vanda miti itaanie na mwanya ula waile matambya eli (2metres) kana o muno. Ino ni nzia imwe ya kusilia mwaki muthuku kuvivya mutitu. Nzia ino itetheesya nundu vaina mbaka/ ngava ila ikwatene kana syi nthi kwoou mwaki uyithiwa utena kindu kya uvivya. Yila

ngava itinite nthi mwaki nuitumiaa ta ngasi ya kuvikia miti iulu.

2. Tila ngava/mbonge ila itinite nthi na ila ngw'u kuma mutini. Na ingi nundu waitia vau syooma nitetheesya mwaki kwakana muno na kulisa kuvikia miti iulu, wamina kusea veta/kua mbonge/ngava isu ukaitwikithye ngu. Kaangi wamina usea miti veta kiko nundu nitetheesya mwaki kwongeleka na nutonya ona kuvivya mii na mithamba ya miti.
3. Seuvya nzia sya utila/kuungamy'a mwaki kwa kuvanda miti utiite mwanya katikati wa milaini/misitali, lakini yila ukwenda kuvanda mutitu mweu nutonya kulea kuvanda kila vandu ukatia mwanya nikana undu mwaki wambiia withie miti ndinakwatania na kuaa mutitu muima. Kitumi kya utia mwanya uyu nutumaa mwaki uvoa tondu vaina kindu kya uvivya.

Yila ukutia myanya ya kutila/kuungamy'a mwaki mitie kwiana na kitheeo. Tia vandu vatekindu kalimani, na ti itheo na yiulu. Mwaki uvivasya wambatite na kwoou uiendeeea na ukwata na kunyaiika. Nundu wa uu nivaile kwa ithyoothie kwika undu tutonya kuola nzia ila mwaki utonya kuvivya thini wa kiima.

Kila ngaliko yi nzia kivathukany'o ya kwakana na kwoou nzia syakukitana na mwaki ni kivathukany'o. Neena na atui maku wone ni ata mekaa kusilia mwaki.

Mazingira Bora



Kipsigis Version

An Environmental, Sustainable
Development and Community Forestry
Program.



TIST Quantifiers in a recent seminar at Gitoro Conference Center, Meru.

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Seret ak chrorretab ketiguk si kobwa komie.

Kasire Ben Misleh.

En kotugul, amune asi keseraser ak kechoror ketk ko asi konyo ketit ko kimiit ak konyo komie. Noniton keyoei koyob chengetab ketik che "kororon" en timwek. En ketik che terterchin che bato blue gum, sebesebe ak taragonik, ko chu kotam ko ketik che echen, agetugul, kotinyei ketit ne kiteta. Agetugul en ketichu kotinyei magutik che terter asi komuch kochok ak kobwa komie. Kora ketik che ter kotinyei magutik che ter kотиенг ole karutunen en ole mi. Ngandan ketik che kakimin en bangonetab TIST ke mine en oratinwek che terterchin (kou ketik che kiboisien ke ter koristo ak che kimine en imbaret ne o) en imbarenik che eech (kou morat tai ne bo Mount Kenya ak morat katam ne bo mount Kenya) che mache magutik che chang chebo robta) ko much keboisen oratinwek che nin.

Si korut ko echegitun, ketik che kororon boroinwek chebo mitaisiek aeng ko kororon. Boroini ko boisie en ketik che chang che bo TIST (Kou blue gum, sebesebe ak taragonik) ngandan nyolu ibwat ile ketik alak komache boroinwek che echen (maembe ak macadamia). Ngigochi ketik bororinwek che kororon ko toreti konyor beek che yomotin ak amitwogik. Chuton ko toreti ketik ko echegitun ak kobwa komie. Boroinwek che rikchinotin ko chomchinot yon mengechen ketik. Ngo tese tai koechegitun ketik, koname kobitu ketik che inaame ko echegitu kosir alak. Miten kora ketik che kemuche ke min ko u ("amitwogik"). Yon kichenge ketik che kisere igeer ketik amitwogik ak igeer ngo yomotin boroinwek. Ngot ko mayame, ketik che rikchinotin ko che istoi.

Yon karinai ketik che nyolu keisto, iyeb ketik ngwony. En wikisiek ak arawek che isibu tillet, ko chang ketik che inaame kosache en ketit ne kigakil. Si keter ketik che rutu kora, che kaisab konyolu ketil anan kengus en tigitik.

Oret agenge ne nyum nyum kenaen ketik che nyolu keisto, ko kegeer kityo kit ne ten ketik nge geerchin ak alak che bo kasarta agenge. Nai ile koet ketit kobee ngungunyat, beek che miten ak alak. En kotugul, ngot kigochi kotugul ketik chebo kasarta ne kerge, ketik che echen ko nyolu kelewen koek che kiribe. Kiit age ne iboru ketik che kororon ko, ole rutundoi ak urwet ne tinyei. ketik che tindoi urwet ne o komuche ko nyor lapkeiyet kosir che

tindoi urwet ne mining, ak komuch korut komie. Ne bo let, ketik ko nyolu kotindoi kwenet agenge, ago amtinyei miando age tugul anan ko much ko chorot. Ngandan, chuton tugul ko ma kemwa kele ketik tugul konyolu kicher kobaten che eechen. Nyolu kobarjigei chi age tugul baraindo nebo mitaisiek asi ko nyor ketik che echen che imuch ko echegitun aak ko kororrenigitun ak komuch koam koristo ne o. Nyon isibi ngalechu mi barak, konyolu ibwat ile, ole rutundoi ketik ko ter terchin kотиенге ketik. Ngot ko maembe korutu en olenegit blu gum che chang, komuch ko miningit ak korut en mutationet kosir blue gum, ngandan manyolu ketil amun mining. En at kai ketit ne u maembe kobo kamanut missing amun en amitwogik en iman ko chang boisionik alak che konech ketik kотиенге ole u, koboto ametab koristo kou ketik komuxh ko onech urwet ne kararan. Kou noton konyolu igochi bororindo ketichu kosi ole tam kou asi komuch kosich lapkeiyet ne o ne imuch ko toret kosach che chang ak konyor kimnatet. Ngot imache iboisien ketik iteren koristo, ibangan ketik en lainit en baraindo ne nwach ngandan nyolu inde komaswek tugul si komuch ko gon teret neo.

Chororet

En timwek che bitei ichegen, ketik kochororige ichegen. Temenik chebo barak kosiche chebo ngwony. Yan meitos temenwek chebo ngwony komee kora temenwek che name. Koyob yautikab barak en ole kigiminchi ketikab TIST Ko much kobo kamonus ana ko mie kechoror ketik keboisien eut. Yon ichenge ile temenik ainchon che yaache kachoror, ko nyolu isib kasibutyet ne nyumnyum ngandan ketit age tugul komuch komache chororet ne ter komiten kasibutik che kerei en ketik tugul. Ketik che chang ko nyolu kotindoi temet agenge kongeten ngwony. Ketik che tinyei temet agenge komuch korut en changchinet amaimuche kopcheak en kasartab tulet. Ngot ko ketik ne imuch kotinyei temenik che chang ko kakilewen kemin komten kasibutik che nyolu yon kichengei temenik che kichorori. Kou ole imuche kemakta ko temet ne o kemuch kebagagta ko rut. Kora temonoton konyolu komatinyei ole kiwechk ak konyolu ko kararan (tinyei sogek che chang.) ak komuch kotetaat.

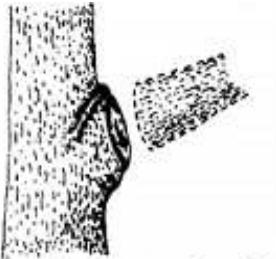
Agenge en tuguk che tinyei terjiniet agobo chororet tab ketik komwaat kele nyolu itil kosib gei



ak temet.Niton ko ma iman.Ole kakitil konyolu kokaisib gei ak temet ne kagitle komi boroindo ne giiten ne kagituch.Niton komuch koboos keetit ne kagituch ak komuch kogochi boroindo pcheutikab keitik en temet korut kosir ole kagakitil en kasarta ne nyone (geer choronet I) Noton kotoreti ketit korut komie amat koyaam.

Yon ichorori komati ting chokchinet.Ketik che ke chororen komuch kobois en kwenik ana ko amitwogikab tuga.Ngandan niton koyaanat missing,inai ile chororet kotoreti missing ketit koet ak ko gimit en kasarta ne nyonei,ngandan kechoror sogek kongemei ole siktoi lapkeyet ketit ak komuch kongem ketit ne imuch kowalak en kasarta ne mining.Yon kerichoror kimuch kebagach oloton kityo.Matiituch ak kiit age tugul ,si komuch koisto tuguk che yaach en yoton.Niton ko kerge ak ole sobtoi moet en chito.

Kiit age ne kimuch koma kimagenki en chororet



Pruning cuts should be made just outside the branch collar.



On a dead branch that has a collar of live wood, the final cut should be made just beyond the outer edge of the collar

ak seret ko ketik komuch kocher temenik alak en ole kagichorori.Niton komugaksei en ketik che terterchin.Ngandan tugul konyumnyum kicheer en kenyit ne tai yeibata chororet.Ole kakichoror komanyolu kosab kogeny. Ketik alak,missing ketik chebo logoek komuch kogon kesutik che chang

yon tindoi temenik che chang.Chuton kemuch ke til en oleinamen temet yaan takomengechen si komuch korut komie.Yon kagosobcho kimuch ketil si kobwa komie.Yautiani kemuch kegetchigei kora si komuch kogon temenik che kororon che chang,ngandan nyolu igeer ile ketuch kasarta ne bo arawek yon ke chorori si komuch kosob ketit ole kigakitil.Ibwat ile si chut ndonyoitab aldaetab koristo konyolu kerib ketik en kasarta ne koi.Nyolu kebagach ketik korut en kasarta ne maregunen kenyisiek sosom,seret k chororet si koechegitun ketik,timwek chebo kasarta ne koi che imuch kotoretech en kasarta ne koi.

Boroinwek ketoret TIST.

Tuguk che echen ko kogo testai en TIST.Ongen tugul agobo keek ne tai en ngwonykikochi chamchinet koalda koristo.Ongen tugul kora ole kikinde sein ak kayanchinet ak Kenya forest service. Che chnag en okwek ongen ole kitesetai kibaite kasitab TIST en Kkenya koba komaswek alak che ter.

Koboto logoiwechu miach,komiten boroinwek che lelach en temikab TIST koib si katestai koboisiechi ak ko tes TIST en Kenya.Kichenge membaekab TIST che tindoi maget ne o kobarait banganetab TIST, che mache kobois ak bik alak che mache kotes boisietab TIST , ak ne mache kogeer kole katesatai kochanga temik che kasich boroido konyor kelchinetab koristo ak banganetab TIST alak.

Chu mi ngwony ko barainwekm che kitesen boisietab TIST ak kokochinetage.Barainwechu tugul komache chitab TIST ne boisie komie ne kim kurupinywa ago tinyei ago kigobor kasibetab tolochikab TIST en sobenyin.Biik che ibe boroinwechu kobendi koboisie ak leadership council ak alak koger kole katestai TIST en boisietab rabinik ne mi ngwony ak nyorunetab tugukab

barak!Niton anyun , oger en chuton oswe ngomiten boisiet ne imuche kogonin imwa ile "ee,yuton ko ole abaisiechini TIST missing."

- kebangan boiseta ak Catholioc Relief services ak banganenywan nebo Green gram project.
- Kebangan boisiet ak Catholic relief services ak banganenyon nebo microfinance ,SILC
- Ketoreten kabaraitetab TIST en Mbeere
- Sirindet ne o nebo Mazingira Bora.
- Chito ne icheru ak kopcheita. Mazingira Bora.
- Cordinator chebo kanetisiet en kebeberwek.
- Cordinator chebo TIST en chorwandit ak bikab Yatta, Mombasa ak en komaswek chebo nguni.
- Chito ne tononchin tesetabtai nebo jikosiek chebo menet en banganetab ketoret si ketoretin.
- Biik che bangani ole u jikosiek ak koyomta.
- Tesetab temisietab ribetab ngungunyek.
- "Biik che chenge boroinwek" che kiminien ketik en kampunisiekab Kenya ak koalda koristo.
- Cordinators chebo TIST council en kurupisiekab klasta ak komaswek alak.

Kogelewen membaekab leadership council somok che choton tugul ko lelach en banganetab TIST kotoret en banganet ab kasarwek che



kiyomdoi kechigil ak kebor kooib boroinwek .Chu ko membaek cheu Mary Kathei-0726283425,Purity Mugo-0724119815 ak Susan Kinanu 0711721219. Mary ko mnamu kebeberiatab Meru ak ole negitchin, Purity ko bo Mbeere,Kirinyaga ak kebeberwek che negitchen ak Sussan ko namu kebebertab Timau , Embu ak ole negitchin.

Agot imache iyomte agenge en boroinwechu,

kaigai imuche inyoru anan ongalal ak chito ne bo olda ngung.Nyolyot ne ke sir anan ibirchi sioit ko bo kamanut ngandan imuche kora imwachi membaekab kandoikab klastaingung ak komuch kopcheita ngalechu koitchi Mary, Susam ak Purity. Ngot itinye tebut age tugul inyoru kandoik che mi klastaingung.

Amune si imach kelewenin iegu kandoindetab klasta?

Komie klastaisiek che sire 100 en TIST, ketinye boroindo ne bo kandoik che sire 300 che leweni membaek alak kila kenyit.niton ko kaborunet ne o ne iboru ole testoi tai TIST en Kenya.

Boroindo neo en chi agetugul nemiten TIST. Chi age tugul ne kakilewen koek kandoindetab klasta (chitab hesabu,rubeiywotab kandoindet anan kandoindet) kotinye kenyit agenge konyor kanetisiet ne tesunot ak koboisiens konunoikab kandoinatet konetgei che chang agobo machinisiek ak oratinwek che kiitisien koguyo mungaretab koristo kosir , ak koboisiechi membaek alak chebo TIST en oldanywan. Siche boroindo koba tuiyosiek koboisi ak kaitik ak korutechi kurupisiek che mengech en klasta kogerchi gei banganutik che kororon en klastainywan, konetge agobo jikosiek, konetge agobo karorindaab ketik che terter chin ak logoiyewk alak che chang.

Missing keeck kandoindet ko boisiet ne o.

Ke ba ak kerutechinot kurupisiek che mengechen en klastaingung komache kebendat , kengalalat, kegeerot ak kesoman.Kebangan asi konyor kurupisiek che mengech chebo TIST ko boisiet ne o.Kinetgei keboisen komputa chebo neut,GPRS,ak ole kinetitoi ge kepcheita logoiwek,ak kebangan kanetisiek chebo barak ak che kororon en tuiyetab kila arawa ko boisiet ne o.Kou olongen che chang en okwek ole yon kesich boroindo iwe seminar chebo TIST iyoru kasarta ne mie ngandan nyolu kora iyai kasit ne o. Iyaei kasit betut komugul,ak itinyei kasit en kemoi iyai!

Noton anyun nyalu iboboENCHI iegu kandoindetab klasta ngo itinyei maget neo inetgee che chang ak iegu ak iboisie en kandoinatetab kurupit ne mining en klastaingung. Ngandan ngot itinye magutichu,amakilewenin kougu boroindo ne kararan en banganetab TIST iboisie. Nengung walunet.

Kebebertab TIST ne bo Lamuria: Temik che inete temik.

Kasire Joseph Thitai.

Kebebertab TIST ne bo Lamuria ko tineyi klasta 10 .Che boto Kiahuko, Male, Matanya, Thome, Muhonia, Mweiga, Sweetwater, Kamangura ak Chuma. Agetugul en klastaichu kotuito en ole kwenet ak ole itchin chi tugul en temikab TIST koba ak kowek kongeten gaa.En kasari, klastaisiek chu kotoyei lewenetab kandoik. En iguni ko leweni klasta age tugukl chitab hesabu. Chitab hesabu ne kimii koegu rubeiywotab kandoindet ak rubeiywotab kandoindet koegu kandoindet ye istoge kandoindet. Boibochin membaekab klasta kandoinatani. Temindet age tugul kotinyei boroindo kondoo ama mi ten chito agenge ne loei nyngisindab kandoinatet ak boisiensin inegen.

Alak en klastaisiek chu ko ki konaam koboisiens temisietab ribetab ngungunyek. Mbareni chu kotoreti temik konetgei olekimuche keyaita temisioni komie.

En kebeberi, koyob tuyosiekab klasta, temik kopchee ngomnatet en lewenetab ketik che kimine en oli. Temik konetgeee ak kinete en lewenetab tenderek, ribeta tenderek ak minet ak chobetab kabetisiek ak ribet. Ne tesat,konetgeee banganosiek che miach en minet ak ribetab ketik en imbarenikab TIST. Ketik che u Acacia, Miringa, Mikinduri ak Muthiga kosiche kyanet en komasi.Ketichu kotinyei borotet ne tesunot ngandan ko konu koristo. Konu logoek,tenderek ak alak ko konu kerichek .Tenderek Croton kobun Mikunduri keboisen en chobetab mwaniakab disel.Kot ne kichoben ko ki kechoben kokwetab Narumoro che chobe mwaniakab diesel.

Chuton ak borotosiek alak en TIST Ko kimiye temik che chang che chute TIST. Kichobot kesir,kinet ak kepchei ngomnotet ak banganet ne mie ak ichek.



Kebebertab TIST ne bo Igembe: Ki kiboitnikab alak,ak en kibagenge kenyoru che chang.

Kasire Joseph Kituma

Banganetab TIST ko tesetai konyoru kimnataet en kebebertab Igembe.Temika chhe chang che kiba ko gas,anan kosoman agobo nyorunetab chomchinet en TIST koalda koristo ko kigimegitun komin ketik che chang.Temik,che kibwa igortaab TIST en Gitoro Conference Centre en Meru Tarikit 3 arawetab 6 2011, ko kiib ngomnataet ne o ak kopcheweche tugukab kanetisiet.Ne sire,ko ketesetai kesomani logoiwekab Mazingira bora ne bo kila arawa che konu ngomnotet ak konetech.

Ngunon,ko kokigimit klastaisiek.Area Cordinators ko tetse tai koboisie ak kandoikab klasta,kanetik ak kaitik koboisiechi temik.Kebeberwek komache kochut TIST koyob ni.Chu ko Mutuati ak Matiandui.

Temik che chang ko tese tai kochute TSIT en klasta

che kibo keny cheu Kawiru MCK ak Antubochio. En koitisiet,kurupisiek 13 ko kinyor koitisiet en kwenutab arawetab tisa ak kwenetab arawetab sisit en kenyini.

Tuiyosiekab klasta chebo kila arawa ko toreti temik ko pchei ak konyor kanetisiet.Temik ko kiginet agobo temisietab ,ribetab ngungunyek ak alak ko b oisien.Che chang en temik koyomdoi temisioni en ole ma o robta ak en minutik che u mosongik ,beek ak mohogo.Missing ko en komasta ne yamat ne bo Igembe ole ma kitiende robta.

Kigimite gei keyomten temisietab ribetab ngungunyek ak kemin minutik che ma kase kemeut. En orasni ,ke eguu che tiengei en amitwogik ak kenyoru che kimuche kialden.

Pcheetab logoiwekab klasta: Opchei borotetab klasta ingwong si o gimit TIST.

En TIST , kesiche kimnataet yon kingalalen keboisie kibagenge ak kepchei borotet ak kurupisiek alak che mengech,en klasta ak ko sir. Pcheetab logoiwekab klasta chebo kila arawa en tuiyosiek ak hesabu ko ba kamanut en borotenywan. Klasta age tugul kotonengeti en kogoitoetab logoiwekab tuiyet ak hesabu chebo kila arawa

Ole kipcheitoi logoiwekab boisietab rabinik ak tuiyosiekab klasta keboisien SMS.

Tagunet ka boisiet ne mie nebo rapinik ko tolochikab TIST.klasta age tugul ne bo TIST ko nyolu kopcheita ole koboisoito ksh 900 budget che bo klasta si konyor borotet ne o. En arawek aeng TIST ko kiboisien oret ne lel , ne nyumnyum ne kipcheitoen boisietab rabinikab arawet ak tuiyetab klasta keboisien SMS. Orani ko toreti membayatab TIST koyoko sms en simoiaib neut kwo nambaitab simoit ne o.Kiyumi sms ak kechigil kiboitnikab TIST.Ngot ko tinyei klasta palm ne boisie ,ko nyolu koboisien fomisiek chebo tuiyetab klasta ak boisietab rabinik che miten en Palm.Ngandan koyob orani lel ,klasta age tugul konyolu kopcheita logoiwek kila arawa.Orani kotoreti koyumy wholetab logoiwekab klasta ak kotoret toretikab TIST.

Klasta 11 ki kiyai kasit ne kararan missing en pcheetab logoiwekab tuiyet. Igwanjau, Murinya, I chuga, Kamuthanga, Miamoja,Tunyai,Matanya, Manyatta, Muriru,Matakiri ak Chemaner. Age tugul ko kigoito logoiwekab tuiyetab klasta en arawetab 6 ak 7.Klasta 11 ko kiyai kasit ne kararan missing kopcheita ole

kiboisoitoen rabinik chebo arawetab 6 ak 7 chechu ko Ankamia,Igwanjau,Kagaena,Kiauko,Kiirua,Limoro, Matanya, Mikunduri. Miruri, Ntrukuma ak Pondo. Klsata che chang ko kigoito logoiwek kwak ngandan tomo kogoito kiy age tugul kurupisiek 55. Ngot ko ma kinyor logoiwek koyob klasta koite kiboitnikab TIST kolemekotesetai kurupit ngwong. En niton, komonyoru rabinikab arawet,boisiet koyob kaitik,ana boroindaab somanet en seminar.Onginetgei kepcheiten logoiwek yok ak borotenyen kila arawa. En logoiwek che chang chebo pcheet,onyoru kandoikab klasta ana ko area cordinator ne ngwony. Kabwatutyet: En borotet,en kila arawa klasta ingwong konyolu:

- 1) koba tuiyetab kila arawa agobwotchi kurupisiek alak koba.
- 2) Kogeer borotet ne kigonyor:ketik che lelach che kigemin ,kurupisiek che kigiichi kettik ak ole kigiboisioito budget en klasta.
- 3) Koyoko logoiwek en Palm anan ko sms chebo tuiyet ak hesabu.
- 4) Kobangan koitisietab koitik.Geer ile chito agenge kogatoret en ngalekab kaitisiet.
- 5) Otach choronok ak bikab kokwet kochut TIST en tuiyetab klasta.Opchei Mazingira Bora ak otoret en siretab ge.
- 6) Oyai borotetne o!Omin ketik, ochob anan oal jiket ne ribe maat,onetgei temisietab ribetab ngungunyek.

Kibagenge kimuche kenyorun ki age tugul!



Kibagenge kenyoru che chang mwae kurupitab TIST nebo Umoja 2005.

Kasire Virginia Wairima.

Echek ,kurupit ne mining ne boTIST ne bo Umoja 2005 ko kikinaam en 2005.Membaitnyon nebo TIST ko 2005KE510.

Kotomo kechutTIST ko kurupit nyon ko kisirat en ministry ne bo Social Services.Kongeten kechut TIST Ko kigeyai che chang ke toret gee en kanaametab kabetisiek,ole kichoptoi jikosiek ak temisietab ribetab ngungunyek.Che chang en

membæk chok ko kikonaam koboisen temisioni en kasasri,kokechop mbareinik chok en kasarta ne roboni ne nyone.

Kibangani kinaam baetab nego ak ngogenik si kimuch ketes kelutikyok.Kibangani kosich borotet membaek agenge en wikit ne nyonei.

Kimae kigimit kurupisiek alak che mengech kobois kibagenge ak konyor borotosiek che chang en TIST.

Kimuche keripten ano maat en osnosiek?Teret ne kiten komuch kwo ole lo!

Kasire Ben Misleh.

Maat ko bo kamanut,ago yon kakiboisen komie komuch kotes ngungunyek ak kororindaab ketit.Ngandan,maat kora koya en osnosiek ak koya en biik yon magiboisen komie.Kou membaekab TIST nyolu kenai kele ne ne iriu maat ak ole kimuche kibosten yaityetab maat.Miten konyil aeng mastinwekab osnosiek, ne tai ko nebo ngwony.Maatab ngwony kowendi mutyo ago matinyei maat ne o.Maatab ngwony kimuche keboisen keistoen osnosiek che mengech,sisiwek ak tuguk alak che ma bo ki en ngwony .Amun kimnatetab maat ko mi ngwony,kobagaktoi kityo belutik che mengech en ngwony en ketit ak komuch koter bertet ketit.Niton koboru kole maat nebo ngwony ko ma weche missiing ketit.Yon kainaam maatab ngwony koet komuch koib maat ne o.En maat ne o koreitoi maat koyob ketik barak.Maat ne o komuch ko ya en ketik amun ngeme ketit kotugul ak sogek ak komuch kobar ketit.Imuch kabar sogek ak temenik.Temenik ak sogek che kagongemak koyaei kouit kosob ketit ye ibata maat.Oratinwek che mengecg che imuch keteren maat komaireitoge en osnet ngandan imuch ko,kogon asenet ne mi ngwony:

- 1) Min ketik en baraindo ne magat ne bo mitaisiek 2 (anan barak).Noniton ko oret ne nyumnyum ak ne bo kamanut ne imuche kebosen maat yon kainaam .Boroindo kobose maat komoireitoge en choginet amun mami ngwony sogek ak ko mami ketik che yomyotin en osnet.En maat temenik che yomyotin ak ketik kotoreti maat kolany ketik barak.
- 2) Til temenik che mi ngwony ,missing che kigoyomyo en ketit ak iiste ketik che kigoyomyo

kotugul,Kora temenik che kiyomyo ak ketik kotoreti mazat kolany barak ak kolal en chokchinet.Geer ile keiste ketik che kakichoror ak ketik alak che kikobutchi ngwony en osnet.Tuguk che ma bo kamanut en ngwony komuch koreito maat ak kokimiit ak kongem ketik,anan ko mkwenet en ketit anan kongem tigitik.Yum ketik che kiyomio si kobosun asenet yon kabit maat ak iboisien kou kwenik.

- 3) Chop tilutikab maat ibogochi kasarwek kongeten ketik agoi ketik alak si kobos maat manyolu iges timwek en osnet ne kiriminch ketik si kabit boroini,ago yon kenaam osnet age ne lel imuch ibangan en oret ne imuch koboos maat.Mamiten 'boroindo' ne kararan en tilutikab maat,ago ma bo kamanut en kotugul .Boisietab tilutkab maat ko gon boroindo ne imuch ko ma miten ketik che imuch kolalyo.Yeie ole mami kiy ko mee maat ama imuch katestai en olda age.

Yton ichobe tilutikab maat ichop tulonokab ngungunyek.Bagach ngwonyndet ne mami kiy en ntulono chu ma kongeten ngwony agoi barak.Maat kolalae kwendi barak,ak komuche kwo mutyo ma kongeten maat ne mi ngwony agoi ne miten barak.Kaliplipenet nebo maat koosoksei en tulwek ak komuch kobosok maat.Maiton komuch kome amekowendi kotesetai noton anyun nyolu kegeer kele kagirib maat missing en ole tulwet.

Kebebertha age tugul kotinyei asenet ne ter ne bo maat,ak oratinwek che ter keboisen en kamoswek che ter.Ongalal ak chitab kokwengung inai kiit ne yaei en teretab maat.