

Mazingira Bora



TIST

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

English Version

An Environmental, Sustainable
Development and Community Forestry
Program.



Nguruki TIST Cluster members during their monthly meeting last month.

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The Importance of Trees.

Trees are very important for environmental and material reasons such as:

A) Environmental improvement -

- Trees cover soil, which protects it from wind and water erosion.
- Leaves and twigs fall to the ground and provide the soil with extra nutrients.
- Trees increase soil moisture by covering the soil and reduce evaporation.
- The tree roots help bind the soil and thereby reduce erosion.
- Tree roots also help water to enter the soil and improve underground water circulation.
- Trees improve local weather conditions by increasing the amount of water vapor in the air with increased humidity.
- Trees improve air quality by absorbing carbon dioxide and releasing oxygen.

B) Material and nutritional value -

- Construction materials used for making furniture, posts, fences, ropes, etc.
- Fuel wood.
- Medicine.
- Food and fodder.

Weeding your tree groves now!

In some areas, rains have started, you should already have transplanted your seedlings into your groves. If you have not yet transplanted them, you need to do so now because seedlings need to be transplanted so they can grow strong in the rainy season and survive the drier months. By looking after our seedlings now they stand a better chance of survival to become strong trees. The most important activity during the rainy season is to weed your seedlings in your groves. Keep the area as clean as possible and pull up any weeds that are growing near your seedlings.

Weeding is important!

- Your seedlings need water, soil nutrients and light to grow strong. The weeds will compete for the soil nutrients and water that your seedlings need, making them weaker and unable to survive.
- If your area is not weeded, more pests will be attracted to the area and damage or kill your seedlings.
- The fewer weeds there are, the less chance there will be of snakes and insects.
- Trees grow faster because weeds won't rob the nutrients and water from the soil.
- Trees will become stronger and grow taller in a shorter period of time.
- Trees get sunlight they need unhindered.
- Trees are not exposed to as many diseases.
- Trees are more protected from a fire spreading.
- Clean groves indicate that all groups are maintaining them and are good examples of the TIST program. This will attract many people to come and see your work.
- Clean groves enable the quantifiers to count the trees quickly and accurately.

We encourage you to weed your groves. Remember to protect the seedlings so that animals, like goats, do not eat or trample on them. Consider fencing the grove or surrounding seedlings with thorn bushes, and if you have some days with no rain, remember to water the seedlings.

The hard work will make a difference by making your trees stronger and healthier.



Thinning your trees for successful growth avoid clear-cutting.

We are very proud that almost all TIST members are following the TIST Values and living by the contract that they signed. Many TIST members have continued to adhere to the Green Gas House contract which allow them to sustainably thin their trees and do harvesting of 5% of their trees when they are 10 years and older.

The purpose of having regular thinning is to achieve maximum growth and value of the trees that are left standing. The cuttings also provide firewood, poles, building materials, and other benefits directly to the TIST participant. That is the reason that we have the policy of creating a sustainable forest by only harvesting a maximum of 5% of the trees per year after the trees are 10 years old.

When an occasional TIST member decides to clear cut their grove, they harm all the rest of the TIST members in their Small Group, in their Cluster and in all of Kenya. The actions of very few people can cause big problems for everyone. We expect other small group members and members of the Cluster to pay attention and make sure that no one cuts trees before they are supposed to.

The LC is going to work with some of the participants who made a mistake and cut the trees to work out a proper plan for those people to reinvest some of their profits into the TIST Program so they are able to help other farmers rather than hurt them.

When we signed the GhG Agreement, we committed to maintain the trees we plant for TIST to let them grow for 30 years before harvest. This is one reason it's so important to think carefully about what kinds of trees we want to grow on our farms. Thinning and pruning can help keep trees healthy and provide useful products while the trees grow.

The purpose of thinning and pruning trees is to improve individual tree health, as well as overall forest health. This is done by protecting the "best" trees in the forest and thinning the others. For many species like grevillea, eucalyptus and cypress, the trees to thin around are 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 or more is recommended. This spacing works for many TIST trees (i.e. grevillea and cypress), but remember some trees require more space like mango and macadamia. Giving trees

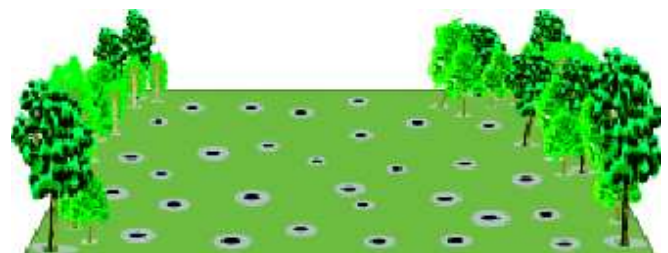
proper spacing helps them get enough water and nutrients to grow to their full potential. Closer spacing is acceptable when trees are young. As the trees begin to mature, some trees will be larger and more robust than their neighbors. These are the trees that should be kept. In determining which trees 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.

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! A mango tree is of great importance due to its usefulness in producing fruit for food and sale.

Best Practices while Thinning

- Allow crop trees to grow to maturity.
- Thin to proper stocking (number of trees per acre). In TIST, we can select up to 5% of our trees, after 10 years, thinning by selecting as they grow, and providing income.
- Remove dying, diseased, decaying, and poor quality trees.
- Protect trees from logging damage.
- Use low-impact logging methods.
- Promote tree species diversity.
- Monitor your forest for insect and disease outbreaks.
- Cooperate with government agencies in controlling forest insect and disease outbreaks.
- Prevent wild fire.

DO NOT do this



Clear cutting

DO THIS



Single tree selection



Waste Management.

Waste is any material that is a by-product of human activity and that may not have immediate value, which includes:

- Human excreta/waste.
- Domestic rubbish like left over food.
- Waste paper.
- Polythene bags.
- Scrap metal, old batteries (dry cells).
- Sewage sludge etc.

What Causes Rubbish Problems In Your Community?

Waste is inevitable but is made more problematic by:

- Wasteful/inefficient use of resources.
- Lack of methods for reusing waste.
- Lack of waste disposal sites (rubbish pits, latrines).
- Lack of knowledge about the dangers of poor waste management.

Consequences of Poor Waste Management.

- Littering of fields and compounds, loss of beauty of the area.

- Pollution of water, air and soil.
- Disease outbreaks.
- Blockage of drainage channels.
- Toxic poisoning and fumes from old batteries.

Children and animals may be poisoned or injured if they pick up and play with old batteries or other rubbish.

What can your Small Group do help solve the problem?

- Reduce or minimize the generation of waste.
- Consider using solar powered products instead of those that use disposable batteries when possible.
- Reusing materials again where possible like plastic bags.
- Composting - save organic waste such as left-over food and fodder as natural fertilizer for use in gardening.
- Dig a rubbish pit in your compound.
- Remember only to burn paper and card, but not batteries as they may explode. You should put them instead into the pit latrine.
- What should they do with plastic? (not burn it - toxic!)



Conservation Farming: Time to prepare your shamba.

TIST Small Group members who have practiced CF have testified it produces a greater harvest more reliably than traditional farming, especially when the rain is scarce. The holes help catch whatever rainfalls and make it available to the crop. This article will help you understand better how to practice kilimo hai. Following these best practices can help you get better yields this coming season.

Preparing the land.

- Prepare your land at least 1 month before the rains.
- Clear your plot of weeds and bushes, but **do not plough.**
- Prepare your holes oblong (rectangle) shape. They should each be 15 cm wide, 35 cm long and 15 cm deep. Space holes at least 75 cm apart.
- Take some manure or compost manure and good topsoil and mix it together. Fill the hole with the mixture up to 5 cm below the surface.

Planting.

- When you plant maize seeds (1 -2 days before rains start), plant 4 seeds in the soil across the hole.
- If you are planting sorghum, plant 5-6 seeds at each end of the planting hole after a good shower of rain.
- Cover the seeds with 2.5 cm of the rich soil and manure mixture. After this the soil in the

hole should be about 2.5 cm below the surface of the field.

- The space at the top of the hole enables water to get to the plants when the rains come. You do not need to use chemical fertilizer on the Conservation Farming plot. Your crops will still do better without chemical fertilizer, if you put enough compost manure.

Weeding.

- Weed around the holes regularly.
- Do not weed the entire plot completely. Outside the holes, plants can cover the soil, keeping it cooler and keeping it from eroding in rain and wind. Just weed in and near the holes. Use a panga to clear weeds between the lines or spaces from one hole to the other. Weed frequently to keep weeds from going to seed and spreading in the holes.
- Leave the weed residue in the plot to rot. This will help add soil fertility.

Post –harvest practices.

- Do not burn off the remains on the plot. Leave the residue on the ground so that they make the soil more fertile. Crop remainders can also be used for compost manure.
- Do not graze cattle in the plot.

We will be glad to celebrate your successful harvest and learn from best practices in your area through this newsletter as well during your cluster meeting. Start working now!



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 an accurate cluster meeting and cluster accounting report every month. Your cluster Quantifier and Trainer will work with you to submit these reports using the Palm computer. Soon, we will be able to see these reports on the TIST mobile website. This way, we can be more transparent and all know that the data reported are accurate.

Cluster servants should work with the Quantifier and Trainer to make sure accurate information is reported in these monthly reports and on cluster elections and representatives. The more we help each other, and hold each other accountable for accurate information and for achieving big results at low costs, the stronger and better TIST becomes.

Reminder: for success, every month your cluster should:

- 1) Attend your cluster meeting and remind other groups to attend.

- 2) Review together the results your cluster has achieved: new trees planted, groups quantified, and how budget was spent together as a cluster. Make this part of the cluster meeting and of your Small Group meetings!
- 3) Send reports by Palm for Cluster Meeting and Cluster Accounting. You can use SMS reporting if your Quantifier and Trainer are not present, but they should be at meetings to serve you.
- 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, 30-50 active Small Groups who meet each month, elected servant leaders, and be carrying out and reporting on good training and quantification.

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Niki miti irina bata.

Miti irina bata mono kiri naria gututhiurukite na kiri gutua into niuntu bwa:

A) Kuthongomia naria gututhiurukite -

- Miti nikunikagira muthetu, na kujurigiria jutakamatwe ni ruugo kana ruuji.
- Mathangu na maang'i nijagujaga muthetune na kua muthetu irio.
- Miti niingiagia ruuji muthetune na njira ya kujukunikira na kwou kunyiyia gukamatwa kwa ruuji niuntu bwa murutira.
- Miri nitethagia kugwatia muthetu na kwou kunyiyia gukamatwa kwaju .
- Miri ya miti kinya nitethagia ruuji gutonya muthetune na kuthongomia kuthiuruka kwa ruuji nthiguru.
- Miti nithongomagia rera ya o ntuku gukurukira kwongera ruuji ruria ruri ruugone.
- Miti nithongomagia ruugo gukurukira kujukia ruugo ruruthuku na kurika ruugo rurwega kiri nyomoo. .

B) Into na irio-

- Into bia guaka biria bitumagirwa kuthithia into bia nyomba, ikingi, nwego, mirigi na bingi.
- Nkuu
- Ndawa
- Irio bia muntu na bia ndithia

Kuurira iria miunda yaku ya miti nandi!

Nandi niuntu ngai niambiritie nubati kwithirwa uthamitie miti yaku yeeta muundene. Kethira utamithamia, nubati kuthithia u nandi nikenda miti yaku ikagia inya igitene ria mbura na yumba gutuura kwooma. Gukurukira kumenyeera miti yetu nandi ikoona kanya gakega ga gutuura na kua miti irina inya. Untu buria burina bata buru mburene ni kurimira miti yaku. Ika antu au kutheri uria

kuumbika na ukurire iria riria rikuuma akui na miti yaku iminini.

Gukuurira iria kurina bata!

- Miti yaku iminini nikwenda ruuji, irio na weru nikenda igia inya. Iria rigashindanira irio na ruuji ruria miti yaku ikwenda na gutuma iage inya na itiumba gutuura.
- Kethira munda jwaku jutikuuriri iria, tunyomoo tututhuku tugakucua antu au na kuthukia kana kinya kuuraga miti yaku.
- O uria kurina iria ririkai nou kanya ga kwona njoka na tunyomoo gakanyia.
- Miti nineneaga ntuti niuntu iria ritiiya irio na ruuji kuuma kiri muthetu.
- Miti ikagia inya na ire ndene ya igita ririkai. .
- Miti nikinyagirwa ni riuu riria ikwenda itikwithwa. .
- Miti itikurugurirwa mirimo imingi.
- Miti nimenyagirwa kumani na gutamba kwa mwanki.
- Miunda itina maria nionanagia ati ikundi bionthe nibikumimeneera na ni ming'uanano imiega ndene ya TIST. Bubu bugakucia antu babaingi kwija na kwona ngugi yenu.
- Miunda imitheru nitethagira Atari miti gutara ntuti na gutara bwega..

Nitukubwikira moyo gukurira miunda yenu iria. Rikana kumenyeera miti yenu iminini nikenda ndithia, ja mburi, itikamirie kana iminyangia. Thuganiria gwaka rwego kuthiuruka muunda kana kwirigira miti na kithaka kia miigua na kethira urina ntuku imwe itina ruuji, rikana gwikira miti yaku iminini ruuji.

Ngugi iu ya inya ikathithia mwanya na njira ya gutuma miti yaku igia inya na igia thiria nkuruki.



Caa miti kenda ikura bwega na turigirie kuriika buru.

Itukwiguna mono tontu akui amemba bonthe ba TIST ibakuthingaatira maritano ja TIST gukurukiira gucaina gwa contract. Ni amemba bakai ba TIST batiumbite gwika wirane, bagitite miti buru na bendia niuntu bwa ngugi ingi. Amu nthiguru ya imwe kiri igana (1%) ya tumwitu 40,000 twa TIST ndene e Kenya nitugiti igitene ria miaka inana iria TIST ithiritwe ikiritaga ngugi Kenya.

Gitumi gia gucaa miti nikenda miti iria itigarite ikura bwega. Gucaa igutethagiria na nkuu, ikingi, into bia bwaka na ibitethagiiria amemba ba TIST. Kiu nikio gitumi twithagirwa turina policy ya kugita miti gacunci ka ithano kiri igana (5%) o mwaka miti yakinyia ukuru bwa miaka ikumi keenda tumwitu tutikathire.

Riria mumemba umwe wa TIST abangaga kugiita miti yonthe, ugwati ibutonyaga kiri amemba bangi bonthe ndene ya gikundi, ndene ya cluster na Kenya. li mma tumantu tuu tutuniini ituretaga thiina kiri muntu wonthe. Itukwirigiira amemba ba cluster na ikundi bakathingatiira uju na gutiwe ukagiita miti riria itibati.

OLC niitite gwita ngugi na amemba baria beeirie na kugita miti kenda boomba kubanga uria bagatethia antu bau gutumira baita yao kiri mitarata ya TIST ya gutethia arimi. Riria twacainire gwitikaniria kwa GhG, twaciejanire kumenyeera miti iria twandite ya TIST na kumirekeria ikura kagita ka miaka mirongo ithatu mbere ya gutemwa. Giki nikiabata kenda tuumba kumenya miti iria tukaanda miundene yetu. Gucaa na gukuura igutethagia miti gukura bwega.

Gitumi kia gucaa na gukuura miti nikenda o muti gukura bwega amwe na mwitu. Bubu buthithagua na njira ya kumenyeera miti iria miega na gukuura ingi. Kiri mithemba imingi ja miti imiumo, giriberia, mibao mauta na cypress, iria ikuuragwa ni imenene na itamburuki. Miti irina mobataru mwanya gukurukiira mithemba, aria yaandi, uria iandi na naria yaandi indi mantu jangi ijabati kuthingatirwa.

Gukuria miti irina na inya, waarii bwa mita ijiri ibu bubati. Waarii bubu ibubujaira mono miti ya TIST i.e. giriberia na cypress indi riikana miti ingi ta miembe na mikandania yeendaga waarii nkuruki. Kwaa miti waarii bubwega ibutumaga ikoona ruuji rwa kung'ana na ruuji nkuruki kenda ikura uria ibaterie. Gukuiianiiria kwa miti kwendekanaga miti iri micanchaana. Miti yaambiriiria gukura, imwe

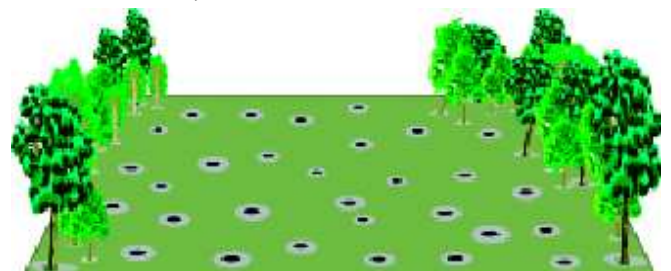
ineneaga nkuruki ya ingi, iji nio ibati gukurua. Kenda umenya ni miti iriku ubati gukuura, tega miti iria miega na wone kethira irina waarii buria bwagirite. Kethira tiu, kuura miti iria iri akui.

Riria ugucaa menya, miti ikuraga mwanya kuringana na muthemba mwanya. Kethira muembe ijugukurira akui na mubau mauta, jugakura mpaari nkuruki ya mubau mauta, indi jukagitwa nontu l muniini! li mma muembe jwina bata mono nontu ijuciaraga matunda ja kuria na kwendia.

Njira injega ya gucaa

- Eteera miti ikure buru.
- Chaa kuringana na wingi (kuringana na miti kiri acre). Kiri TIST, tuthuuraga gacunci ka ithano kiri igana (5%) kiri miti yetu, nyuma ya miaka ikumi tugicaaga kuringana o uria igukura na gutwaa baita.
- Kuura miti iria ikwora, ikunyaara, irina murimo na iria itigukura bwega.
- Rigiiria miti ityakarikwe.
- Riika na njira iria yaagirite.
- Anda miti ya mithemba imingi.
- Menyeera mwitu jwaku nontu bwa mang'inyo na mirimo.
- Gwatanira na thirikari niuntu bwa kumenyeera mang'inyo na mirimo.
- Rigiiria mianki ya mwitu.

Ukathithia uju.



Kugiita miti buru

Thithia uju.



Kugiita muti jumwe jumwe.



Kumenyera Guta Mati na ruko.

Mati ni gintu kionthe kiumanagia na ngugi iria muntu aitaga ntuku cionthe agatiga biria atikwenda na no bithirwe bitina gitumi orio. Into bibi nija

- Kioro kia Muntu.
- Into bia Nja ja irio biria bitigere.
- Maratasi.
- Maratasi ja Nylon/plastiki.
- Chuma na maiga ja tochi jamathiru.
- Sewage.

Ni mbi iretaga thina iji

Mati kana Ruko ruru ni gintu tutiumba kwebera na nijathukagua nkuriki ni

- Kurega gutumira into bietu bwega.
- Kwaga njira injega cia gutumira into biria kairi.
- Kwaga gintu kana into bibiega bia gutera mati na ruko ruru.
- Kwaga umenyo na uume bwa ati ruko ruru ni ruruthuku na ruthukie uturo bwetu.

Guta mati na ruko ruru na njira iria itibui keretaa:

- Kwagia bieni na nja cietu uthongi.
- Kuthukia riera, ruuji na muthetu jwetu.
- Kureta mirimo ya mithemba.
- Kuinga mibaibo iria itejaga ruko.
- Sumu gutamba.

Twaana na nyomoo cietu biomba kugwatwa ni sumu iji kana kuringwa beta gutindania na ruoko ruru kana nyomoo cietu ciaria nyaki iji.

Natia Ikundi bietu bikomba gutetheria kuthiria thina iji

- Kunyiya gutumira ruko.
- Gutumira into biria bigutumira mwanki jwa riuu jaju Solar antu agutumira biria bitumagira maiga ja guta jathira inya.
- Gutumira into bimwe kairi aria gukumbika ja maratai ja nailoni.
- Kuthithia mboleo na irio biria biatigara antu aguta.
- Kwinja kirinya gia guta mati njeku.
- Kurikana kwithia maratasi aki ja ti ja nylon na ukaithia maiga ja tochi nontu jomba gutunduka. Jaja jabwiri gutewa kiorone kia nthi.



Ni igita ria kuthuranira munda jwaku niuntu bwa urimi bubwega.

Amemba ba ikunbi bibinini bia TIST baria bageretie kurima na urimi bubwega nibaritite ukuji ati nibuciaraga iciara ririnene na riumba gweterwa guti na uguaa kiri urimi bwa kawaida, mono mono ririangai itikung'ana.

Marinya nijatethagia kugwatia ngai iria ikagua na gutuma ruuji ruru rwithirwa rurio kiri kimera. Mantu jaja jagagutethia kwelewa bwega nkuruki uria ubati gutumira njira ya urimi bubwega. Kuthingatira miitire iji iria miega buru gugagutethia kwona iketha ririega nkuruki mbura iji ijite.

Kuthuranira muunda

Thuranira munda jwaku no mweri jumwe kabele ka mbura.

- Rita maria na ithaka muundene jwaku. Ukarima.
- Thuranira marinya jaku. Nijabati kwithirwa jari na warie bwa sentimeta ikumi na ithano, uraja bwa sentimeta mirongo ithatu na ithano na kwinama sentimeta ikumi na ithano. Taarania marinya jaku na sentimeta mirongo mugwanja na ithano kana nkuruki.
- Jukia mboleo inkai na muthetu jumwega jwa iguru na uunganie. Ujuria kirinya na muunganio juju mwanka gikinye sentimeta ithano nthiguru ya nthiguru itirimi.

Kuanda

- Waanda mbeu cia mpempe (ntuku imwe gwita ijiri mbele ya mbura kwambiria), anda mpindi inya kiri muthetu kugitania kirinya.
- Kethira ni ugimbi ukuanda, anda mpindi ithano gwita ithanthatu o muthiene jwa o kirinya ga kuanda nyuma ya mbura injega mma yaura.
- Kunikira mbeu na sentimeta 2.5 cia muunganio juria jwa muthetu jumunoru na mboleo.

Nyuma ya kwongera muunganio juju kirinya kibai kwithirwa kiri senimeta 2.5 nthiguru ya naria nthiguru itirimi.

- Kanya karia gagutigwa kirinyene iguru nigatethagia ruuji gukinyira imera riria mbura ijijaga.
- Gutina aja ya gutumira fertilizer cia kuguura kiri muunda jwaurimi jumwega. Imera biaku bikathithia bwega kinya warega gutumira fertilizer, wekira mboleo ing'ani.

Gukuurira iria

- Kuurira iria akui na irinya o igita o igita.
- Ugakurira munda junthe iria rionthe. Oome ya marinya, imera nobikunikire muthetu, bikajuika jurina gapio na bigatuma jutakamatwe ni mbura kana ruugo. Kuurira iria aki marinyene na akui na marinya. Tuumira kibanga gukurira iria gati gati kalaini kana itigatinekuuma kirinya gwita kingi. Kurira iria o igita o igita nikenda maria jatiraciare mbeu na jatamba marinyene.
- Tiga matigari jam aria muundene kenda joorera ku. Bubu bugatethia kuongera unoru bwa muthetu. aria ubati kuthithia warikia guketha
- Ukaithia matigari ja muunda. Jatige nthiguru nikenda jomba gutuma muthetu junora nkuruki. Matigari ja imera no jatimirwe kinya kuthithia mboleo.
- Ukarithia ndithia muundene. Itu rikana, tukagwirua mono gukeneera iketha riaku ririnene na kuthoma kuumania na miitire imiega buru ntuurene yaku gukurukira gazeti iji amwe na igitene ria mucemanio jwaku jwa cluster.

Ambiria kurita ngugi thaa iji!



Gutuma ripoti cia Cluster: Gaana jaria uumbene kirijo nikenda wikira cluster yaku na TIST inya.

Ndene ya TIST, nitugiaga inya ndene ya kujukia matagaria turi amwe na kugaana uumbani bwetu na bangi ndene ya ikundi bibinin, ndene ya cluster na kungi. Ripoti cia o mweri cia micemanio na utumiri mbeca cia cluster ngicunci kirina bata mono kiri uumbani bubu. O cluster ni ngugi yayo gutuma ripoti cia mma ciegie mucemanio na utumiri bwa mbeca o mweri. Mutari miti na muritani wa cluster yaku bakaritaniria ngugi na cluster gutuma ripoti iji bugitumagira Palm. Igita riti kuraja, tukoomba kwona ripoti iji kiri website ya thimu ya TIST. Na njira iji, tukoomba kuaa ba weru nkuruki na kumenya ati mantu jaria jonthe jari kiri ripoti ni jaria jario jongwa.

Ariti ngugi ba TIST nibabati kuritaniria ngugi na atari miti na aritani kumenyeera ati mantu jaria jarioo jongwa nijo jari kiri ripoti iji cia o mweri na kiri ithurano bia cluster na arungamiri. O uria tuguthethania, na gwitikania na ripoti cia mantu jamma na jari jao jongwa na kiri kuthithia manttu jamanene tugitumagira mbeca inkai, nou TIST igakura kiinya na kuthongoma nkuruki.

Rikana: Nikenda tuumbana, o mweri cluster yaku niibati:

- 1) Gwita mucemanione jwa cluster yaku na uriikanie ikundi bingi gwita.

- 2) Tegereeni mantu jaria cluster yenu yuumbite kuthithia: miti imieru iria iandi, ikundi biria bitariri miti na uria mbeca cia cluster cia o mweri ciatumirwe ni cluster. Thithieni untu bubu bue gicunci kia micemanio ya cluster na ya gikundi gikinini!
- 3) Tuumeni ripoti cia mucemanio na utumiri bwa mbeca cia cluster na Palm. No butume ripoti na ntumwa cia thimu kethira mutari miti na muritani wenu ati akui, indi nibabati kwithirwa bari micemanione nikenda babwitira ngugi.
- 4) Bangireni utari miti na atari miti. Menyeera ati kuri na muntu kuuma cluster yenu kiri utari miti bunthe!
- 5) Gaana Mazingira Bora iji na ubatethie kuthingatira njira ya kuuria gutonya kiri TIST.
- 6) Thithieni mantu jamanene nkuruki! Aandeni miti, akeni kana bugure mariko ja nkuu inkai, burime na njira ya urimi bubwega.

Rikama: Cluster irina inya niibati kwithirwa irina miti imitare nkuruki ya ngiri magana jairi, ikundi bibinini mirongo ithatu gwita mirongo itano biria bitirimanaga o mweri, atongereria ba uthumba babataare na ithirwe ikithithagia na kuandika ripoti cia uritani na utari miti bubwega.

Mazingira Bora



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Akima a Nguruki TIST Cluster mucemanio-ini wao mweri muthiru

Thiini wa Ngathiti:

Bata wa miti. Page 2

Guceha na gutagania miti yaku niguo ikure wega. Page 3

Gute Giko. Page 4

Mahinda ma kuhariria mugunda waku niundu wa Kilimo Hai. Page 6

Ripoti cia Cluster: Heana maundu maria mukinyaniirie niguo Cluster yanyu igie na hinya. Page 6



Bata wa miti.

Miti nimiega niundu wa maria maturigiciirie na maundu mangi ta;

A) Kwagirithia maria maturigiciirie.

- miti niuhumbagira tiiri, iria imiteithagiriria kumana na ruhuho na maai.
- Mahuti ma miti nimekagira tiiri unoru.
- Miti niyongagirira ugunyu wa tiiri na igatuma tiiri uikare na maai.
- Miri ya miti niinyitaga tiiri na igatuma ndugakuu ni maai.
- Miri ya miti ningi niiteithagia maai kuingira tiiri-ini wega.
- Miti niithondekaga riera
- miti niiteithagia kugucia carbon dioxide kuma rieraini na kurekereria oxygen.

B) Indo cia gwaka na ciakuria.

- Indo cia gwaka iria cihuthikaga hari indo cia nyumba, ikingi, rugiri na ingi nyingi.
- Ngu.
- Dawa.
- Irio cia mahiu.

Kurimira miti yaku riu!

Riu tondu mbura niyurite, niwagiriirwo nigukorwo uhandite mimera yaku mugunda-ini. Angikorwo nduhandite, niwagiriirwo nigwika uguo tondu mimera niyagiriirwo nikuhandwo kahinda gaka ka mbura niguo ikure iri na hinya. Riria twamenyerera mimera iitu riu, niigukorwo namweke wa gukura ituike miti iri na hinya. Kaundu karia ka bata muno kahinda-ini gaka ka mbura ni kurimira miti na gutigirira niithereirwo wega.

Kurimira ni kwa bata!

- Mimera yaku niirabatara maai, unoru wa tiiri na utheri wa riu niguo ikure iri na hinya. Riia nirigucindana na mimera yaku kuona indo ici na ritume ikure itari na hinya.
- Angikorwo mugunda waku timurimire wega, tutambi tuingi nitukugumira mugunda waku na tuthukie mimera.
- O uria kuri na riia inini, noguo gutangikorwo na nyoka na tutambi tuingi.
- Miti ikuraga na-ihanya tondu riia ritirimitunya unoru na maai kuma tiiri-ini.
- Miti niikugia hinya na iraihe na-iguru gwa kahinda kanini.
- Miti niikinyagirwo ni utheri wa riu muiganu.
- Miti ndinyitagwo ni mirimu muno.
- Miti niigitagirwo kumana na gutherema kwa mwaki.
- Mugunda mutheru wa miti wonanagia gikundi nikiramenyera miti yoa wega na gigakorwo kiri kionereria kiega gia TIST. Njira ino niikuguciriria andu anigi kuingira TIST.
- Migunda mitheru niiteithagia atari a miti gutara miti na uhuthu na naihenya.

Niturakuhinyiriria utherie mugunda waku. Ririkana kugitira mimera kumana na mahiu. Na kungikorwo niguikarite gutari na mbura, ririkana kumiitiriria maai.

Wira mwega niukwonia ngurani na kuhotithia miti gukura iri na hinya na miega.



Guceha na gutagania miti yaku niguu ikure wega.

Thiini wa TIST, nitwirutagira guturia miti iria twahanda na tukatreke ikure miaka itanyihiire 30 mebre ya gutemwo. Giki nikio gitumi kinene giagutuma twicirie muno mithemba ya miti iria turahanda migunda-ini iitu. No ona kuri o uguo, guceha na ggutagania miti niguteithagia miti gukura ii na hinya na kuheana umithio mwega riria irakura.

Hamwe, gitumi kia guceha na gutagania miti ni kwongerera ugima wa muti kiumbe na wa mutitu uri wothe. Uu wikikana kuhitukira gucchagura miti iria miega thiini wa mutitu. Kuri mithemba miingi, hamwe na miti iria itagwo hardwoods, grevilea na mibau na mithithinda, niyo muno ikoragwo iri minene gukura iria ingi iri mitungu wega. Miti niibatara muigana wa mugunda ngurani kuringana na muthemba waguo, kuria uri, muhandire na riera no maundu mangi nimatumaga.

Niguu muti ukure uri na hinya, utaganu wa 2 mtrs niwagiriire. Utaganu uyu wagagirira miti miingi (ta grevilla na cypress), no uririkane miti ingi niibatara utaganu munenanene (ta maembe, macadamia). Riria wahee miti utaganu muiganu nigutumaga miti ikinyirwo ni maai na unoru wa tiiri ni igakura wega na iri na hinya. Utaganu munini wa miti nimwitikiriku riria miti iri minini. Na riria yambiriria kugimara, miti ingi niigukorwo iri miraihu gukura iria ingi. Ino niyo miti iria yagiriirwo gutigwo mugunda. Niguu umenye miti iria ugutema, rora miti iria miraihu na wone kana niitaganitio wega na angikorwo timitaganu no uteme imwe yayo.

Thutha wa kumenya miti iria ugutema, mitemere haria gitina-ini. Thutha wa ciumia na mieri, imwe yayo niithudukaga. Na niguu ndigakure ringi, tinia mahuti maria marathunduka kuma githuki-ini.

Njira imwe ya iria huthu ya kumenya muti kana niwagiriirwo nigutemwo nikurora unene wayo uringithanitie na iria iriganitie nayo iri ya riika na mutemba umwe. Gukura kwa miti nogukorwo kuri na utiganu kuringana na tiiri na maai na mangi maingi. Angikorwo miti ya muthemba umwe mwena umwe iri na ukuru uiganaine, miti iria minene niyagiriirwo ni gucagurwo niguu ikure. Njira ingi ya kumenya ugima wa miti ni kurora mururi waguo. Miti iria iri na mururi muraihu gukura iiria ingi noihote kwamukira utheri muiganu na ikure na ihenya. Na muthia, miti yagiriirwo gukura na mwahu umwe, na itari na mirimu minene kana ironda. No ona kuri o uguo, uu tikuga ati miti yothe minii niyagiriirwo nigutemwo! Tigirira utaganu niwa 2-3mtrs niguu miti ikure iri minene niguu ihote kugucia carbon nyingi.

Ugitua matua ma gutagania, ririkana mukurime wa muti ningurani kuringana na muthemba wa muti. Angikorwo miti ya maembe irakuranira na mibau,

maembe nomakure mari manini na ikure kahora muno gukura mibau iria ikuraga na ihenya, na ndiagiriirwo nigutemwo tondu niminini! Muti ta muembe niwabata niundu wa matunda maria ukuragia na makendio.

Maembe nimakuranagira na indo ingi migunda-ini. Mibau ndirekaga muti kana mumera ungi ukure hakuhi. Niwega kuririkana uguo riria uracagura miti ya gutagania.

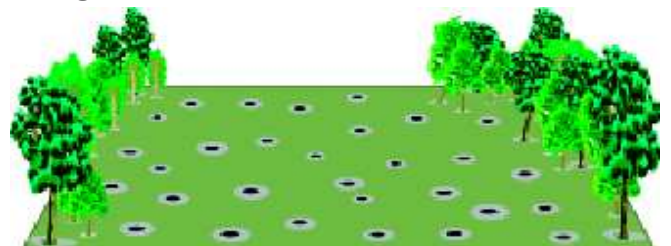
Miti niikoragwo na mabata maingi kuringana na muthemba waguo. Kwa muhiano, nowende muti niundu wa kiruru. Niundu wa uguo, niwagiriirwo kuhe muti mweke muiganu niguu utheremie mahuti.

Angikorwo urenda gukuria muhari wa miti niundu wa kunyihia ruhuho, tigirira miti niyakuhaniriria no wehutie iria itari mahariini niguu ndugathondeke githaka.

Mitaratara ya gutagania.

- Reke miti ikure nginya igimare.
- Korwo na namba ya miti iratwarana na muigana wa mugunda waku. Thiini wa TIST, noucagure gicunji kia miti kia 5%, thutha wa miako 10, gutagania miti o igikuraga na kurehe umithio.
- Eheria miti iria irakua, iri na mirimu na itari na ugima mwega.
- Gitira miti kumana na utemi utari mwitikiriku.
- Tema miti na njira itakuhukia mutitu waku.
- Handa miti mithemba miingi.
- Rora mutitu waku ndugatharikirwo ni tutambi.
- Nyitanira na honge cia thirikari niguu kugitira mirimu.
- Gitira miaki.

Ndugeke uu



Kuheria gutheria

Ika uu



Guthuraniria miti



Gute Giko.

Giko ni kindu o giothe kimanaga na mawira ma mundu na ni;

- Mai ma mundu
- Matigio ma irio
- Maratathi mahuthiku
- Cuma nguru na mahiga ma tochi makuru
- Sewage.

Mathina ma giko marehagwo nikii micii-ini?

Giko gitingiithemeka no githukagio muno ni;

- Uhuthiri muuru wa ino
- Kwaga njira cia kuhuthira indo nguru
- Kwaga kundu gwa gute giko
- Kwaga umenyo wa mogwati maria marehagwo ni giko.

Mathina maria marehagwo ni giko

- Guitanga mahuti nja na kunina uthaka wayo.
- Guthukia riera, tiiri na maai.

- Kurehe mirimu.
- Kuhinga kuria maai ma giko mageraga.
- Guthukia riera makiria na mahiga makuru ma tochi.

Ciana kana nyamu nocikorwo ugwati-ini riria ciongania mahiga maya ma tochi na giko kingi.

Mungika atia muri gikundi guteithiriria kunina thina uyu?

- Nyihia-i uteangi wa indo.
- Huthira-i hinya wa riuu handu ha mahiga ma tochi.
- Huthiraga-i indo nguru riria kwahoteka.
- Thondeka-i thumu na matigio ma irio.
- Enja irima ria giko gwaku.
- Ririkana gucina maratathi. Ndugacine mahiga ma tochi tondu nomarute mwaki, maikie kioro.



Mahinda ma kuhariria mugunda waku niundu wa Kilimo Hai.

Arimi aria marimite na Kilimo Hai mari na uira ati magetha ni maingi gukira urimi wa ki-nduire na makiria riria mbura iri nini.

Marima nimateithagia maai ma mbura kuigika na guteithia mimera na njira iria njega.

Uhorro uyu niuguguteithia gutaukuo wega uria ungiteithika na Kilimo Hai. Kurumirira mitaratara miega niguguguteithia kugia na magetha mega.

Kuhariria mugunda waku.

Hariria mugunda waku mweri umwe mbere ya mbura yurite.

- Tuguta mahuti maria mari mugunda-ini, ndukarime.
- Enja marima ma rectangle. Magiriirwo nigukorwo na warii wa 15cm na uraihu wa 35cm na uriku wa 15cm na umataganie na utaganu wa 75cm.
- Ikira thumu na tiiri wa iguru na utukanie. Ikira mutukanio ucio na utigie 5cm.

Kuhanda

- riria wahanda mbembe(matuku 1-2 mbere ya mbura yurite), handa mbegu 4 irimaini.
- Wahanda muhia, handa 5-6 irima-ini thutha wa mbura kuura.

- Humbira mbegu na tiiri muigana wa 2.5cm.
- Haria irima ritaiyurite hateithagiriria kuiga maai.

Ndurabatara gutumira fertilizer ukihuthira Kilimo Hai. Mimera yaku no igukura wega ona hatari fertilizer ungikira thumu muiganu.

Kurimira

- rirmira irimaini maita maingi.
- Ndukarimir mugunda wothe. Nja ya irima, mimera no ihumbiretiiri, niguo kuuiga uri mugunyu. Rimira hakuhi na irima. Huthira ruhiu kwehutia riia riria riri gatagati-ini ka mimera. Rimira maita maingi niguo riia ritikaingihe irima-ini.
- Mahuti ma riia riria watuguta matige mugunda-ini. Njira ino niyongagirira unoru tiiri-ini.

Maundu ma thutha wa kugetha.

- Ndugacine mahuti mugunda thutha wa magetha. Tiga mahuti macio mugunfa-ini niguo manorie tiiri. Matigari ma mimera nomathondeke thumu.
- Ndukariithie mahiu mugunda-ini, ririkana nitugakena tugikunguira magetha maku na guthoma kuma kuri wee.

Ambiriria wira riu.



Ripoti cia Cluster: Heana maundu maria mukinyaniirie niguo Cluster yanyu igie na hinya.

Thiini wa TIST, nitukoragwo na hinya riria turoya makinya ma hamwe na kuheana maria tutoretie kuri arimi aria angi a ikundi ciitu ona thiini wa cluster na makiria.

Ripoti cia o mweri thiini wa micemano ya cluster na mathabu ni cia bata muno hari gutorania. O cluster iri na uigiririki wa gutuma ripoti nginyaniru na mathabu ma o mweri. Atari na athomithania a cluster yanyu nimakuruta wira na hinya hamwe niguo mamuteithiririe gutuma ripoti ino kuhitukira Computer ya palm. Ica ikuhi nitugukorwo na uhoti wa kwona ripoti ici kuhitukira Mobile Website. Kihitukira njira ino, notukorwo na utheri na tumenye ugoro uria wakinya ni mukinyaniru. Atungata a TIST magitriirwo kuruta wira hamwe na atari a miti na athomithania niguo gutigirira maundu macio nimakinyaniru thiini wa ripoti cia o mweri thiini wa ithurano cia cluster na arugamiriri. O uria turathii na mbere na guteithania na tugatigirira o mundu nimukinyaniru hari maundu maya noguo tukugia na TIST numu na iri na hinya.

Kiririkania: Niguo kugia na maciaro, o mweri cluster yagiriirwo:

1. Guthii micemano-ini nakuririkania aria angi ugoro wigii micemano.

2. Kurora maciaro ma cluster: miti miero iria mihande, ikundi iria itariirwo miti, na uria mathabu maratwarithio thiini wa cluster. Tigirira nimwaririria maundu maya micemano-ini.
3. Tuma ripoti na palm computer cia micemano na mathabu ma cluster. No utume SMS angikorwo atari na athomithania matiri hakuhi no no muhaka makorwo micemano-ini niguo mamutungate.
4. Hariria utari wa miti na atari. Tigirira kuri na mundu wa kumateithiriria!
5. Nyita ugeni andu matari amemba a TIST thiini wa micemano yanyu ya cluster. Heana ngathiti ya Mazingira Bora na umateithiririe kwiyandikithia.
6. Korwo na maumirira mega! Handa miti miingi na ugure riiko ria TIST, huthira Kilimo Hai.

Ririkana: Cluster iri na hinyayagiriirwo nigukorwo na miti itanyihire 200,000 iria mitare, ikundi 30-50 aria macemanagia o mweri, atongoria athure na makorwo magituma ripoti cia o mweri.

Mazingira Bora



TIST

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Kiswahili Version

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Wanachama wa Nguruki TIST Cluster wakati wa mkutano wao mwezi uliopita.

Ndani:

Umuhimu wa Miti. Page 2

Kupunguza miti yako ili ikue vizuri, jiepuche na kukata miti yote. Page 3

Usimamizi wa taka. Page 4

Ni wakati wa kutayarisha shamba lako la Kilimo hai. Page 5

Nguzo ya taarifa: Shirikisha mafanikio yako kufanya nguzo yako na TIST nguvu. Page 6



Umuhimu wa Miti.

Miti ni muhimu sana kwa sababu za kimazingira na nyenzo kama vile:

- A) Uboreshaji wa Mazingira -
- Miti hufunika udongo , jambo ambalo huulinda kutokana na mmomonyoko wa udongo kupitia upepo na maji.
 - Majani na matawi huanguka chini na kuongeza virutubisho kwenye udongo .
 - Miti huongeza unyevu katika udongo kwa kufunika udongo na hivyo kupunguza kupotea kwa maji.
 - Mizizi ya miti inasaidia kushikanisha udongo na hivyo kupunguza mmomonyoko wa udongo.
 - Mizizi ya miti pia inasaidia maji kuingia udongoni na kuboresha mzunguko wa maji ardhini .
 - Miti kuboresha hali ya hewa ya kila siku na kuongeza kiasi cha mvuke wa maji katika hewa (kuongeza unyevu).
 - Miti huboresha hewa kwa kufyonza kaboni na kutoa oksijeni.
- B) Nyenzo na thamani ya lishe -
- Vifaa vya ujenzi vinavyotumika kwa ajili ya kufanya samani, ua , kamba , na kadhalika
 - Kuni
 - Dawa
 - Chakula na lishe

Palilia miti yako sasa!

Sasa kwa kuwa mvua imeanza unapaswa kuwa ushapandikiza miche yako shambani mwako . Kama bado kuyafanya haya , unahitaji kufanya hivyo sasa kwa sababu miche inahitaji kupandikizwa ili iweze kukua kinguvu katika msimu wa mvua ili kuweza kuishi wakati wa miezi kame. Kwa kuichunga miche yetu sasa, ina nafasi bora zaidi ya kuishi na kuwa na

nguvu. Shughuli muhimu zaidi wakati wa msimu wa mvua ni kupalilia miche yako katika mashamba yako. Weka mazingira ya miche yako safi kama iwezekanavyo na hutoe magugu yoyote yanayomea karibu miche yako.

Kupalilia ni muhimu !

- Miche yako inahitaji maji, virutubisho na mwangaza ili kukua. Magugu yatashindana ili kupata virutubisho vilivyo katika udongo na maji ambayo miche yako inahitaji , na kuifanya kuwa dhaifu na kushindwa kuishi.
- Kama eneo lako halijapaliliwa , wadudu zaidi wavutwa eneo hilo na kuharibu au kuuua miche yako.
- Jinsi magugu yalivyo machache ndivyo kuna nafasi ndogo ya nyoka na wadudu.
- Miti hukua haraka kwa sababu magugu hayaibi virutubisho na maji kutoka kwenye udongo.
- Miti itakuwa imara na itarefuka kwa kipindi kifupi .
- Miti itapata mwanga inayohitaji bila kuzuiwa.
- Miti haipo wazi kwa magonjwa mengi.
- Miti inakuwa imelindwa kutokana nakuenea kwa moto.
- Mashamba safi yanaonyesha kwamba makundi yote yanayalinda na ni mifano mizuri katika mpango wa TIST. Hili litawavutia watu wengi kuja na kuona kazi yenu.
- Mashamba safi yanasaidia wahesabu miti kuhesabu miti kwa haraka na kwa usahihi. Tunawahimiza kupalilia mashamba yenu. Kumbuka kulinda miche ili wanyama , kama mbuzi , wasije wakaila au kuikanyaga . Fikiria kujenga uzio au uzungushe miti ya miiba , na kama mna siku sizizo na mvua , kumbuka kuwekea miche maji.

Kazi ya bidii italetwa tofauti kwa kuifanya miti yako kuwa na nguvu na afya njema .



Kupunguza miti yako ili ikue vizuri, jiepushe na kukata miti yote.

Tunajivunia sana kuwa wanaTIST wote wanafuatilia maadili ya TIST na kuishi wakizingatia kandarasi walivyotia saina. Ni wanaTIST wachache waliovunja mkataba huo, wakakata miti yote na kuiuza kutumika vinginevyo. Kwa kweli ni chini ya asilimia moja ya mashamba elfu arobaini katika Kenya imekatwa katika miaka nane ambayo TIST imekuwa Kenya.

Madhumuni ya kupunguza miti ni ili miti iliyobaki ikue na dhamani yake ipande inavyofaa. Miti hii iliyokatwa pia hutupa kuni, fito, vifaa vya ujenzi na faida nyinginezo kwa mshiriki wa TIST. Hii ndio sababu tuna sera ya kuanzisha msitu endelevu kwa kuvuna miti isiyopitisha asilimia tano baada ya miti kufikisha miaka kumi.

Wakati mwanaTIST mmoja napoamua kukata shamba lote, wanadhuru wanaTIST wote katika kikundi chao, katika cluster yao na katika Kenya yote. Kwa kweli, matendo ya wachache hao yaweza kuletea shida kila mmoja. Tunatarajia wanakikundi wengine na wanacluster kuwa makini na kuhakikisha kuwa hakuna anayekata miti kabla ya wanapopaswa.

Kikundi cha OLC kitafanya kazi na baadhi ya washiriki waliofanya kosa na kukata miti kufanya mpango wa hao watu kurudisha sehemu ya faida yao katika mradi wa TIST ili waweze kusaidi wakulima wengine badala ya kuwaumiza.

Tulipotia saina mkataba wa makubaliano wa GhG, tuliahidi kutunza miti tunayopanda katika TIST na kuiacha kukua kwa muda wa miaka thelathini kabla ya kuvuna. Hii ni sababu moja ya kwa nini ni muhimu kufikiria kwa makini kuhusu ni miti ya aina gani tunayotaka kukuza katika mashamba yetu. Kupunguza miti na kupogoa kwaweza kusaidi kuweka miti ikiwa yenye afya na kutupa vitu vinavyotumika miti bado ikikua.

Kwa ujumla, maana ya kupunguza na kuipogoa miti ni kuboresha afya ya kila mti, pamoja na ya msitu wote. Hili litafanyika kupitia kuichagua miti iliyo bora zaidi katika msitu. Kwa aina nyingi za miti, pamoja na miti ya mbao, grevillea, mikaratusi na cypress, miti hii san asana huwa miti mikubwa zaidi, kila mti ukiwa na shina moja lililonyooka. Miti yaweza kuwa na mahitaji mbalimbali ya nafasi kulingana na aina, mahali, ilivyopandwa (miti iliyo mashambani ya mimea ya vyakula ama miti iliyopandwa ili kupunguza upepo) na tabia nchi, lakini kuna kanuni zingine za kijumla hutumika.

Kukuza miti iliyo na nguvu na afya, nafasi ya mita mbili hupendekezwa. Nafasi hii ni sawa kwa miti mingi ya TIST (grevillea na cypress), lakini kumbuka kuwa miti mingine huitaji nafasi zaidi (miembe na mikandamia, kwa mfano). Kuipa miti nafasi inavyofaa hiusaidia kupata maji na virutubisho tosha vya kuikuza hadi panapowezekana. Nafasi ndogo zaidi inaruhusiwa miti ilipo michanga. Miti inapokua, miti mingine itakuwa mikubwa kuliko majirani.

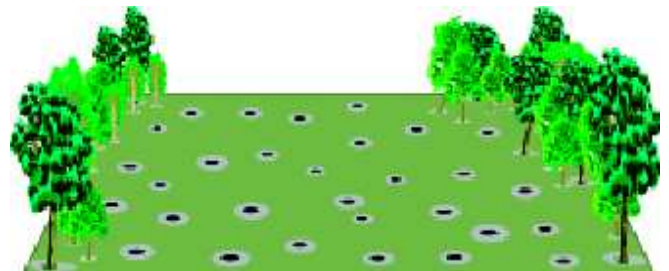
Hii ndiyo miti wapaswa kuacha. Kuchagua ni miti gani ya kukata, angalia miti iliyo bora zaidi na ujue kama ina nafasi ifaayo. Kama haina, wafaa kutoa miti mingine iliyo karibu.

Unapofanya uhamuzi wa kupunguza miti, kumbuka kuwa kiwango cha ukuaji hutofautiana kulingana na aina ya mti. Kama mwembe unakua karibu na mikaratusi mingi, mwembe unaweza kuwa mdogo na unaokua pole pole zaidi ya mikaratusi inayokua haraka, lakini kwa uhakika haupaswi kukatwa kwa sababu ni mdogo zaidi! Kwa kweli, mti kama mwembe ni wenye umuhimu mkubwa kwa sababu ya matumizi yake katika kupeana matunda ya kula na a kuuza.

Mazoezi bora unapopunguza miti

- Iruhusu miti kukua hadi ukomavu.
- Punguza hadi inavyofaa (nambari ya miti katika ekari). Katika TIST, twaweza kuchagua hadi asilimia tano ya miti yetu, baada ya miaka kumi, kupunguza kupitia kuchagua inavyokua na kutuletea pesa.
- Kata miti inayokufa, iliyo na magonjwa, inayooza na isiyo na ubora.
- Linda miti kutokana na uharibifu kutakana na ukataji wa magogo.
- Tumia njia za ukataji magogo zenye athari chache inapowezekana.
- Himiza wingi wa aina za miti.
- Fuatilia msitu wako ili kujua kukizuka wadudu na magonjwa.
- Shirikiana na kampuni za serikali katika kudhibiti kuzuka kwa wadudu na magonjwa.
- Zuia mioto ya msitu.

USIFANYE hivi



Kukata miti yote

FANYA hivi



Chagua mti mmoja mmoja.



Usimamizi wa taka.

Taka ni kitu chochote kinachotokana na mazi za binadamu na yaweza kukosa utumizi wa mara moja, na ni pamoja na:

- Choo cha binadamu.
- Uchafu wa nyumba kama mabaki ya chakula.
- Makaratasi yasiyotumika.
- Mifuko ya mpira.
- Chuma, betri zimeisha (seli kavu).
- Maji taka sludge nk.

Ni nini husababisha shida za taka katika eneo lako?

Taka haiwezi kuepukika lakini yafanywa kuwa shida zaidi na:

- Matumizi mabaya ya rasilimali.
- Ukosefu wa njia za kutumia tena.
- Ukosefu wa mahali pa kutupa taka (mashimo ya taka, vyoo vya kuchimba).
- Ukosefu wa ujuzi wa hatari za usimamizi mabaya wa taka.

Usimamizi mabaya wa taka husababisha.

- Uchafuzi wa mashamba na viwanja, kupoteza urembo wa eneo hilo.

- Uchafuzi wa maji, hewa na udongo.
- Kuenea kwa magonjwa.
- Kufungana kwa paipu za kuondoa maji taka.
- Sumu na moshi mbaya kutokana na betri nzee

Watoto na wanyama waweza kupata sumu au kuumizwa wakiokota na kucheza na mawe mazee na taka nyinginezo.

Kikundi kidogo chako chaweza kufanya nini kutatua shida hii?

- Kupunguza kutengeneza kwa taka.
- Fikiria kutumia vifaa vinavyotumia nishati kutokana na jua badala ya nishati inayotokana na betri inapowezekana.
- Kutumia tena – tumia vitu tena inapowezekana (mfano, mifuko ya mpira).
- Kutengeneza mbolea – weka uchafu unaoza (mabaki ya chakula cha binadamu na cha mifugo) kama mbolea ya kutumia katika kulima.
- Chimba shimo la taka kiwanjani mwako.
- Kumbuka kuchoma makaratasi na kadi pekee. Usichome betri kwani yaweza kulipuka. Yaweke katika vyoo vya shimo.



Ni wakati wa kutayarisha shamba lako la Kilimo hai.

WanaTIST katika vikundi vidogo ambao wamelima kwa kutumia njia ya Kilimo hai wameshuhudia kuwa ukulima bora una vuno bora na la kuaminika kuliko ukulima wa kawaida, san asana wakati mvua haitoshi.

Mashimo husaidia kushika mvua wowote unaonyesha na kuyawezesha haya maji kupatikana kwa mmea.

Makala haya yatakusaidia kuelewa zaidi kuhusu jinsi ya kujaribu kilimo hai. Kufuatilia mienendo bora ifuatayo kutakusaidia kupata mavuno bora zaidi msimu unaokuja.

Kutayarisha shamba.

Tayarisha shamba lako angalau mwezi mmoja kabla ya mvua.

- Ondoa magugu na vichaka kutoka shamba lako. Usilime.
- Tayarisha mashimo yako ya umbo la mstatili. Yapaswa kuwa na upana wa sentimeta kumi na tano, urefu wa sentimeta thelathini na tano na kina cha sentimeta kumi na tano. Nafasi kutoka shimo hadi lingine iwe sentimeta sabini na tano.
- Chukua mbolea na udongo wa juu na uchanganyishe. Jaza shimo kwa huu mchanganyiko hadi sentimeta tano chini ya ardhi ya kawaida.

Kupanda.

- Unapopanda mbegu ya mahindi (Siku moja au mbili kabla ya mvua), panda mbegu nne kuvuka shimo.
- Kama unapanda wimbi, panda mbegu tano au sita katika kila mwisho wa shimo la kupanda baada ya mvua tosha.

- Funika mbegu kwakutumia mchanganyiko wa udongo na mbolea. Baada ya haya udongo katika shimo uwe sentimeta mbili na nusu chini ya ardhi ya kawaida.
- Nafasi iliyopo juu ya shimo itasaidia maji kufikia mimea mvua ijapo.
- Hauhitaji kutumia mbolea za viwandani katika shamba lako la kilimo hai. Mimea yako itafanya vizuri hata bila ya mbolea za viwandani.

Kuondoa magugu.

- Ondoa magugu kuzunguka mashimo mara kwa mara.
- Usipalilie shamba lote. Nje ya mashimo, mimea yaweza kufunika udongo, huku ikiuweka baridi na kuuzuia kumomonyeshwa na mvua au upepo. Tumia panga kutoa magugu katikati ya mistari au katika nafasi iliyopo kati ya mashimo. Palilia mara kwa mara kuzuia magugu kuzaa na kuenea mashimoni.
- Yawache mabaki ya magugu shambani ili yaoze. Haya yatasaidia kuongeza rutuba ya udongo.

Unayofaa kufanya baada ya kuvuna.

- Usiyachome mabaki ya shamba lako. Yawache udongoni ili yaongeze rutuba ya udongo. Mabaki ya mimea yaweza pia kutumiwa kutengeneza mbolea.
- Usiwalishe ng'ombe shambani lako. Tafadhali kumbuka, tutafurahi kusherehekea vuno lako kubwa na kuijua mienendo bora katika eneo lako kupitia jarida hili pamoja na katika mkutano wako wa cluster.

Anza kufanya kazi sasa!



Nguzo ya taarifa: Shirikisha mafanikio yako kufanya nguzo yako na TIST nguvu.

Katika TIST, tunapata nguvu katika kuchukua hatua za pamoja na kushirikiana mafanikio yetu na wengine katika Makundi yetu Small, katika makundi yetu, na kwingineko. Kila mwezi taarifa juu ya nguzo mikutano nguzo na uhasibu ni sehemu muhimu ya mafanikio haya. Kila nguzo ni kuwajibika kwa kuwasilisha sahihi nguzo mkutano na nguzo ripoti ya uhasibu kila mwezi. Nguzo yako ya makwantifaya na mkufunzi kazi na wewe kuwasilisha ripoti hizo kwa kutumia kompyuta Palm. Mapema, tutakuwa na uwezo wa kuona taarifa hizo kwenye mtandao wa TIST Mkono. Kwa njia hii, tunaweza kuwa na uwazi zaidi na wote tunajua kwamba data taarifa ni sahihi.

Nguzo ya watumishi wanapaswa kufanya kazi kwa makwantifaya na mkufunzi ili kuhakikisha taarifa sahihi ni taarifa katika ripoti hizo kila mwezi na juu ya nguzo uchaguzi na wawakilishi. zaidi sisi kusaidiana, na kushikilia kila mmoja kuwajibika kwa taarifa sahihi na kwa ajili ya kufikia matokeo kubwa kwa gharama nafuu, TIST nguvu na bora inakuwa.

Mawaidha: Kwa ajili ya mafanikio, kila mwezi nguzo yako lazima:

- 1) Hudhuria nguzo yako mkutano na kuwakumbusha makundi mengine ya kuhudhuria.

- 2) Kurekebisha pamoja matokeo nguzo yako imepata: miti mpya kupandwa, vikundi kukaguliwa, na jinsi bajeti zilitumika pamoja kama nguzo. Kufanya hii sehemu ya mkutano wa nguzo na ya Small yako Group mikutano!
- 3) Send taarifa na Palm kwa Nguzo Mkutano na Mhasibu Nguzo. Unaweza kutumia SMS kuripoti ikiwa makwantifaya yako na mkufunzi haipo, lakini wanapaswa kuwa katika mikutano ya kuwatumikia ninyi.
- 4) Kuandaa quantification pamoja na Makwantifaya. Hakikisha mtu kutoka nguzo yako kusaidia katika kila quantification!
- 5) Mualike rafiki yako na majirani na kujiunga na TIST katika kikao nguzo. Shirikisha hii Bora Mazingira na kuwasaidia mchakato wa maombi.
- 6) Matokeo ya matokeo makubwa! Kupanda miti, kujenga au kununua kuokoa nishati jiko, mazoezi CF.

Kumbuka: Nguzo imara lazima kuwa na angalau miti 200,000 kukaguliwa, 30-50 kazi vikundi vinaweza kukutana kila mwezi, waliochaguliwa mtumishi viongozi, na kuwa kufanya nje na taarifa juu ya mafunzo mazuri na quantification.

Mazingira Bora



TIST

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

Kikamba Version

An Environmental, Sustainable
Development and Community Forestry
Program.



Nguruki TIST Cluster members during their monthly meeting last month.

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Vaita wa Miti.

Miti niyithiawa ya vata kwa mawithy'ululuko na utumiku ungi kwa itumi ithi:-

A) Useo kwa Mawithyululuko:-

- Miti niwika na kusuvia muthanga kumana na kukuwa ni kiseve kana kiw'u.
- Matu na tuukava twavaluka nitwoaa na kunenge muthanga unou.
- Miti niyongelaa kimeu muthangani nundu niyikia muuyi na kuola kiw'u kuny'aa na mituki.
- Mii ya miti niyovaa muthanga na kusii kukuwa kwa w'o ni kiw'u.
- Mii ya miti nitetheeasya kiw'u kulika muthangani.
- Ni nisevasya Nzeve ya vandu kwa kwongela kiw'u kila kikiseveni. (humidity).
- Miti ni sevasya nzeve kwa kwosa nzeve ila itavisaa (Carbon Dioxide) na kumya nzeve ila ivisaa (Oxygen).

B) Vata wa miti ta liu na syindu sya utumnia

- Miti ya kwaka, mbwau sya kwaka na kusevya mii ya nyumba vamwe na makanda.
- Ngu na makaa.
- Ndawa.
- Liu na uithyo.

Kuimia miti yaku yu!

Nundu yu mbua niyambiie niuseo wambiie uthamya mbeu ila syi kivuioni ethiwa ndwaa ambiia na kutwaa kithekani nikana ikwate na iimea nesa yu kwi mbua nikana itonye kumiisya myaini ya sua.

Kingi kya vata nikana niwaile uimia miti yaku yu nikana yike nesa nundu kwi mbua. ikiithya vala uvandite miti nivekala ve vatheu undu vatonyeka.

Kuimia ni kwa vata!

- Miti yaku nikwenda kiw'u, unou wa muthanga, na kyeni nikana yiane yina vinya. Ethywa ve yia nisikwambii kuania kiw'u kyeni na iituma miti yaku yiana yimyonzu.
- Ethywa kisio kyaku nduimite, tusamu tula twanangaa nitukuka na kwananga/kuaa miti yaku.
- Oundu vena yia inini now'o tusamu na nzoka itethiwa vo.
- Vate yia miti niyianaa na mituki nundu vai kindu mekuanii liu na kiw'u.
- Vate yia miti niyianaa na kuasava na mituki kwa ivinda inini
- Miti nikwataa kyeni kila ikwenda vate kusiiwa.
- Miti ndivikiwa ni mowau maingi
- Miti nisiwe kuma mwaki kuyaiika kwa mituki.
- Miti mitheu yionany'a kana ngwatanio yenyu niyithiitwe iyika undu vaile kwianana na walany'o wa Tist na ii ni ikwendeesya andu aingi na mayendeewa nikuka kuthukuna nenyu.
- Miti mitheu nitetheeasya muthuimi na muvitukithya kumitala namituki na kwa w'o.

Nituu kuthuthya uimie miti yaku. Lilkana kusuvia indo kwananga miti yaku. nowikiie wiio vala vena miti minini kumisuvia na ethiwa kunamba kua ngithya na uyikia muuyi ungu.

Kuthukuma na kithito nikuu ete kivathukanyo kwa kutuma miti yaku yithiwa yina vinya na yiminou.



Kutaanisa miti kwa kwiana kwailu kwa miti, ndukenge.

Ithi nthini wa TIST vakuvi ithyoothe nituatiiaa mawalany’o na nzia nzeo sya tist tuatiie na kwikala kuatiiana na wiw’ano ula tweekie saii. Ni andu anini ala matulile wiw’ano uu na meenga miti yoo yonthe na mamita kutumiwa nziani ingi.. kwa w’o ni anini kwi kilio kya 1% kati wa miti ila ivanditwee nguumoni syi mbee wa 40,000 sya TIST nthini wa Kenya ila syengetwe myakani 8 ila TIST yithiitwe iithukuma vaa Kenya.

Kitumi kya kutaanisa miti kila ivinda ni kuvikia kwa miti kwiana vya vate kuvingiisana na ingi na vaita wa muti ula watiwa kwongeleka. Kutaanisa kuu nikunenganae ngu, miti ya kwaka, na moseo anga ala maumaas mutini muteme kwa ene TIST. Kii nikyo twithiawa na walany’o museo wa kwikalya mititu kwa kuketha iyingiva 5% ya miti ila twinayo kwa mwaka ethiwa yina myaka ikumi kwambata no ti itheo wa myaka isu.

Yila memba wa TIST waamua kwenga miti yake ,ni uumiasya kakundi kake kala ke nthini wa ngwatanio ya tist nthini wa Kenya. Kwa w’o wiko uu wa andu asu anini nuetae nthina munene kwa kila umwe. Twiikwata tukundi tunini na a member oothe kumanya na kuikiithya vaiumwe unatemanga miti yake itavikiite ivinda ya utemwa.

OLC nikuthukuma vamwe na amwe ala meekie makosa ma kutema miti yoo yoonthe na kusisya walany’o ula matonya utumia kuikiithya andu asu nimavanda ingi ukwati woo nthini wa walany’o wa TIST nikana methiwe matonya kutethya aimi vandu wa kumaumisy.

Yila tweekie saii wiw’ano wa GhG Agreement, twithwaa tweekyuma kwikalya miti yitu ila tuvandite ta ya Tist vandu va myaka 30 mbee wa kumiketha. Kii nikimwe kati wa itumi ila twaile usisya mbee wa kuvanda miti ni miti yiva tukwenda nthini wa miunda yiotu na ikwithiwa itonya kwikala kwa ivinda yiu iteudemwa. Kusea na kutaanisa miti ni useo nundu niku nengae miti kwiana nesa na kuitunenge vaita wa utumia usyao wa miti o iendee na kwiana.

Kwa vamwe vata wa kusea na kutaanisa miti ni kwailya uima wa muti na mutitu w’ontho. Uu wikawa kwa kusuvia miti ila miseo mutituni kwa kuveta ila itena uima museo na ila itonya kutuma uyu museo uteana nesa. Kwa mithemba mingi ya miti ta mikuvulya, minyoonyoo, misanduku miti ya kuveta ni ila minene ila yina muthamba umwe mulungalu. Miti niyithiawa na mawendi kivathukany’o ya mwanya kwianana na muvai wa muti na niva ivanditwe na ivandiwe ki (ta miti ivandaniw’e na liu kana ya kusii nzeve), uvinduku wa nzeve onakau mawendi amwe methiawa kwa kila muvai.

Kumea yina vinya, na yaile miti kaingi niyendaa utaanuu wa matambya eli kana maingi. Mwanya uyu wa matambya eli kaingi uthukumaa kwa miti ta mikuvulya na misanduku. lilikana ka miti ingi niyendaa mwanya munenange ta miembe na mikandania. kunenga miti mwanya ula waile ninengae miti ivuso ya kukwata kiw’u nesa na unou kuma muthangani na kwiana undu vaile. Kuvanda miti uthunganie vanini nikwitikilikaa kwa miti

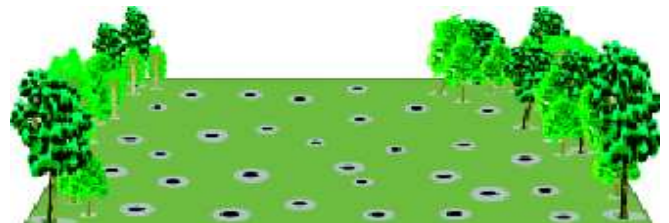
yi mini indi oundu miti iendee na kwiana imwe niyonekaa yi minene kwi ingi. Miti ino minene kwi isu ingii niyo yaile kuekwa na ila minini iteanite nesa kuvetwa, Sisy miti ila minene na miseo yila usakua miti ya kutia uendee na utaanisa miti. Ethywa yothe no miseo sisy uole imwe nikana ivikie utaanuu ula waile na yithiwe itonya kwiana nesa.

Yila usakua miti ya kuveta lilikana, kwiana kwa miti kuendanasy na muvai wa muti nundu mithemba imwe niyianaa kwi ingi. Ethywa ni kiembe kimeete vakuvi na musanduku, kiembe nikyonekaa ta kite kwiana nundu musanduku wianaa mituki, kii ti kitumi kya kuveta kiembe nundu ni kinini anyee. Sisy useo na vaita wa muembe ni mwingi kwi wa musandu nundu muembe no utumike ta liu na no ukunenge mbesa wata matunda maw’o.

Mawiko maseo yila utaanisa miti

- Eka miti ila ya liu yiane nginya ivike
- Ola miti yanie ila yaile uyiatiia walany’o wa miti ila yaile kwithiwa nthini wa eka umwe. Nthini wa TIST no tusakue nginya 5% ya miti yitu itina wa myaka ikumi,
- Kutaanisa oundu iendee kwiana na iendee kutune ukwati.
- Kuveta ila myumu, miwau, iendee kwoa na ila itemiseo.
- Suvia miti kumana na kiw’u kuema uthi
- Tumia nzia ila itatuumanasya kiw’u
- Kwata mbau uvandi wa miti mithemba kivathukany’o
- Syaiisya mutitu waku kumana na tusamu tula twanangaa na uwau
- Ngwatana na athukumi kuma ngwatanioni sya selikalini kusii mowau na tusamu tula twanangaa mititu.
- Siia mwaki wa kitheka.

NDUKEKE UU



Clear cutting

IKA UU



Single tree selection



Kwithiwa na ukumu iulu wa takataka / mavuti.

Takataka ni kyoothe kila kyumanaa ta utialo wa mawiko ma mundu na kiten a vaita kwake, na ithi nita:-

- Mai ma mundu.
- Kiko kuma ikoni ta matialyo ma liu.
- Mathangu.
- Mathangu ma nailoni.
- Syuma nguu, mavia ma tosi.
- Kiko kuma kambunini.

Nikya u kietae nthina wa mavuti nthini wa mbai yenyu?

Takataka no muvaka no utwikaa nthina:-

- Ethiwa vai nzia nzeo ya kutumia syindu.
- Ethiwa vai nzia nzeo ya kuutumia ingi.
- Ethiwa vaina vandu va kwikya ta maima, syoo.
- Ethiwa andu maina umanyi iulu wa mathina ala maetawe ni kiko/takata/mavuti.

Mathina ala maumanaa na nzia nthuku sya kuvea takataka

- Kuthokoany'a iwanza na kuveta wanake wasyo.

- Kuthokoany'a kiw'u, nzeve na muthanga.
- Kuete uwau.
- Kulinda nzia sya kuveta kiw'u.
- Kutwika muisyo kwa kumya sumu ta kuma maviani ma tosi makuu.

Syana na indo nitonya kukwata ni sumu uyu kana kuumia ethiwa ikathauka na mavia ma tosi makuu kana mavuti/takataka ungi.

Nata kakundi kenyu katonya kwika kuola nthina uyu?

- Kuola nzia ila ietae takataka/mavuti kwa kutumia syindu nesa.
- Kutumia syindu ila iutumia mwaki wa sua vandu va mavia ma tosi ethiwa nivatonyeka.
- Kutumia ingi kila kitanangikaa kwa mituki ta mathangu ma nailoni.
- Kwinza maima ma kwikia kiko/mavuti ta liu ula watiala na mavuti kuma muundani na kuseuvya vuu.
- Inza yiima ya kiko kwaku na kyoo.
- Lilikana kuvivya mathangu na ti mavia ma tosi nundu no mavulike. Mavia mekie kyooni kya iima.



Ni ivinda ya kuseuvia miunda kwa nima ya kusuvia.

Tukundi tunini twa TIST tula twithiitwe tuitumia nzia ino ya nima ya kusuvia (CF) nimaendee na kukwata ngetha mbingi na nzeo kwi yila mana tumiaa nzia sya kitene sya nima ona yila mbua nini.

Maima nimatetheeasya kutumaninia kiw'u yila mbua yaua kwoou uyithia kivakuvi kwa mimema.

Ithanguu niyukutwetheesya kuelewa na kumanya mbee iulu wa Kilimo hai. Kuatiia nzia ithi nikuukutetheesya kukwata ngetha nzeo mbua ino yukite.

Kuseuvia muunda.

Seuvia muunda waku vainyiva mwai umwe mbee wa mbua kwambiia.

- Thesya kisio withie kiina yiia kana ikuthu. Ndukaima.
- Seuvia maima maku mema kona inya. Kila yimwe yaile ithiwa yina uthathau wa 15cm, uasa wa 35cm and uliku wa 15cm. Utaaniu wa maima waile ithiwa wi 75cm.
- Osa vuu na muthanga wa iulu uvulany'e na uyususya yiima yii ta 5cm na muvulany'o usu.

Kuvanda.

- Yila ukuvanda mbemba (mithenya ili ka umwe mbee wa mbua kwambiia) vanda matonya ana muthangani usu ikelene ma mbemba.
- Ethiwa wi vanda muvya vanda matonya 5-6 kithyululu mwisoni wa yiima itina wa mbua kua nesa.

- Vwika mbeu na muthanga muvulanye na vuu uliku wa 2.5cm itina wa uu yiima yitiwa yina mwanya wa 2.5cm.
- Mwanja uyu watiwa niw'o utetheeasya kiw'u kuvikia mbeu/ngii yila mbua yaua.
- Tilasima utumie mbolea ya kuua (fertilizer) yila ukwika uimi wa kusuvia muundani waku. mime yaku noikwika nesa watumia vuu wa yiima.

Kuimia.

- ima uthyululukite maima kaingi
- Ndukaima kisio kiu kyothe savali umwe vuu. Nza wa maima, mimea noivwike muthanga na kutetheesya kuuthithya na kusiiia kukuwa kwa muthanga ni nzeve kana mbua. Ima tu vakuvi na yiima na yimani. Tumia kilovoo/kivanga kwenga yiia yila yi mwanyani ula uaanitye maima. Ima kaingi kusiiia yiia kuvikia mimea .
- Tia mavuti aya na yiia moee kisioni kiu, nundu moa meendee na kuete unou wa muthanga.

Kuvutha Itina wa ngetha.

- Ndukavivye matialyo/mavuti muundani. Ekana namo nundu ni unou wa muthanga, kana ukue ukamainde yiimani useuvye vuu/mbolea.
- lilikana ndukaingie indo muundani wamina ngetha.
- Kwa ndaia lilikana kana tukatana naku weethiwa na ngetha nzeo itina wa kwimanyisya na kuatiia nzia nzeo sya uimi wa kusuvia kwisila ithanguni yii na mbumbanoni sya ngwatanio yaku sya kila mwai.

Ambiia uthukuma oyul!



Kutunga livoti kwa ngwatanio (Cluster): Tutavye undu mwikite na kila kitumite muendee kuthuthya ngwatanio ila ingi na kwikia vinya TIST.

Nthini wa TIST, tukwataa vinya kuma kuthukumani vamwe na kuaiana kila twinakyo nthini wa ngwatanio situ na mbee. Livoti syaw’o sya kila mwai sya ngwatanio na ikundi na masavu masyo ni syavata muno kwa kutethya ngwatanio kuendee na kwiyaka. Muvitukithya wenyu vamwe na mumanyisya nimeuthukuma vamwe maitumia Palm Computer kutunga livoti ithi. Mituki, nitukwithiwa tutonya kwona livoti ithi nthini wa website ya simu ya TIST. Kwa nzia ino kila kindu kiithwa kyenini mbeange na kutunga livoti kuyithiwa kwi kwa w’o.

Uthukumi wa ngwatanio niwaile uthukuma vamwe na muvitukithya na Mumanyisya kuikiithya livoti sya kila mwai ila ikutungwa nisyaw’o ona iulu wa usakuani wa ngwatanio. Kii kikatethya umwe kwa ula ungi na kila umwe akeethiwa ena muio wa kunengane livoti yaw’o na kuvikia usyao munene kuma utumikuni muni, na no w’o ngwatanio ya TIST ikuendee na kuseuva nakwithiwa na vinya.

Kilikany’o: Kwa kuendee kila mwai ngwatanio yenyu niyaile:-

1. Kuvika wumbanoni wa kila mwa na kulilikanya ikundi ila ingi kuvika.
2. Kusisya kwa vamwe kila muvikiite: Miti myeu ila muvandite, ikundi ila mbitukithye, na undu

mutumiite mbesa syenyu kwa vamwe ta ngwatanio (Cluster). Twai uyu ta umwe wa kwika kila ivinda mwakomana mbumbanoni nthini wa ngwatanio na ikundi vamwe na tukundi twenyu.

3. Tungai livoti kwa Palm ila sya ngwatanio na masavu menyu. No mutumie nzia ya utumani mukuvi wa simu (SMS) ethiwa muvitukithya na mumanyisya wenyu ndevo, onakau nimaile ithiwa kila wumbano kumuthukuma.
4. Vangai kuvitukithw’a mwina muvitukithya, na ikiithyai umwe wenyu evo kumukwata kw’oko nthini wa kila ivitukithya.
5. Thokya anyanyau na atui kulika nthini wa TIST yila mwina w’umbano. Manege ithangu ya Mzingira Bora kumatetheesya kwiyandikithya na kwisomea na kwona useo wa TIST.
6. Nzeuvya usyao munene! Vanda miti, ua kana useuvye yiiko ya usuvia mwaki, Tumia nzia ya uimi wa kusuvia (CF).

Lilkana: Ngwatanio (Cluster) numu yaile ithiwa iiyiva miti mbee wa 200,000 ila mivitukithye, tukundi/ikundi katiwa 30-50 ila siuthukuma na ikomanaa kila mwai, athukumi /atongoi asakue ni ene ngwatanio, na ngwatanio ikutunga livoti nzeo kila mwai vamwe na uvundisya museo na uvitukithya.

Mazingira Bora



TIST

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

Kipsigis Version

An Environmental, Sustainable
Development and Community Forestry
Program.



Nguruki TIST Cluster members during their monthly meeting last month.

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Miyeitab ketik.

Miyeitab ketik kogochin emet itondo ne kararan ak tuguk cheginyorunen kou;

A. Itondab emet

- Ketik kotere ngungunyek, komoib koristo anan ko beek.
- Sogek kotoreti ngungunyek kogochin oguwoindo.
- Igochin ngungunyek konyor beek ak koter beek.
- Igochin tigitik konam ngungunyek asi moib beek.
- Igochin tigitik beek kochut ngungunyek.
- Igochin ketik itondo konyor beek.
- Igochin ketik kounetab koristo.

B. Tuguk che kiboisien ak omitwokik

- Kinyorunen ketik tuguk chegitegsen.
- Kwenik.
- Kerichek.
- Omitwokik ak che tuga.

Sember ketiguk en iguni

Kotomo konyo robta iger ile kemin ketik en imbarenguk kotom iya inguni iyai amun asi konyor robta kominotin sigochon ak kogime kitun amun kosich beek kit nebo komonut ko isember ketik

en imbarenguk, chob imbaret kotililit.

Semberet kobo komonut.

Ketik komoche beek, moche omitwokik, moche loboiyetasi konyo koet, akot komesember kotorer beek ketik ago monyuru itondo ketik.

- Agot komagisember imbaret koibu susurik che imuchi kwam ketik.
- Yon tilili imbar komobwone tiyongik cheu ndorok ak susurik.
- Bwone ketik kochogu.
- En kasarta ne nuach koegitu ketik.
- Nyoru asista ketik.
- Monyuru ketik miyouwek.
- Itabitu mat komololtose ketik amun momiten timndo.
- Imberet netilil koboru koribotin tuguk tugul chemiten yoton ago iboru koborunet ne kararan agobo TIST.
- Imbaret ne karan kogochin koitindet koit ketik en choginet ak en imanit.
- Ngot imbarenguk asi mochut tuga, nego asi komowech ketikk.

Kogiletagei en boisionik kogonu besiet en igochin ketik kogimegitun ak konyor itondo ne kararan.



Kechoror ketiguk sigogororogitu ak ibagach kolulet.

Kiboboi mising amun kingen kele membakab TIST kosibi tolochikab TIST ak kotebie en koyochinet ne kioyan. Ngerin temikab TIST che kibus koyochinoton, miten che kilit ketik ak kuwalta koboisien, kebeberiat 1% en imbarenik 40,000 che kigimich ketikab TIST en kenya ko kogonam kotit ketik en kastab kenysisiek sisit kongeten igeto TIST en kenya.

Amune asi kechochor ketik kosigobwa kome ak konget kotonontos kinyoru kuwetik, postisiek ak chegitesen en eche temikab TIST niton anyun komitenngatutiek neribe osnet anan asi konget ketik muwoe kole keges kebertab 5% en ketik cheitinen en kasartab kenysisiek taman kongeten igemin nyon kabit imbaret ne kogitinen ketik tugul, kogonu asenet neo mising en kurubit, en kilasta ak en emet tugul. Biik chengerin cheimuchi kogochi biik alak asenet neo. Kimongu biikab kurubisiet chemengech ak kilasta kogasit komtil ketik en kasarta nemonyolu.

Kondoikab oli kotonyi boroindo koboisii biik che kogikochi lelutiet kou tiletab ketik amun kimogin biik konyor melegto en ketik asi kotestai tetetab TIST.

Kin kogagiochin en koyosienyon (ghg) kogimitech niton kerib ketik chegigemin ago moetenech keges koit kenysisiek sosom, niton kogobwotutiet ne kararan missing kibwat kele ketik ochon chegimuchi kegol en imbrenikyok kechoror ketik ko kararan amun kinyorune kelut ak kobwa kochok ketik.

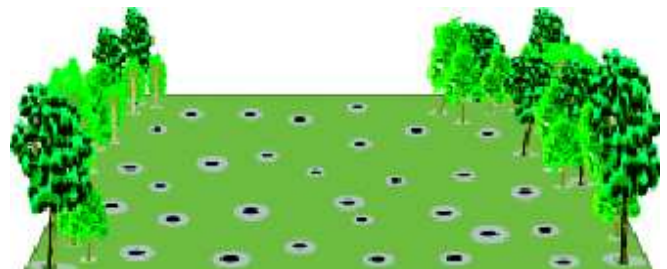
Ye kiyoe kouniton kogochin ketit konyor itondo ne kararan ak kobit osnet ne kararan niton koribetab ketik ak kemin alak miten alage kou kipkaa, sebesebe, chepkogutgei ak cheborus ko ketik chegitu agomotinye temenik chechang, ketik agetugul kotinye mogutik kiik, anage kobo kwenik, tere alage koristo alage kemine ak rurutik. Alage kowole itondab emet.

Nyolunet anyun kemin ketik kokwontik oeng anan kosomok, asi konyor kimlotet ketik niton ko koyochinetab TIST. Ketik alak (kou maembe ak avocado) komoche kokwoutik chechang chesire mut, enyor ketit kokwoutik cheyome konyoru beek ak omitwogik cheyome go etu kitit komie. Monyolu kemin ketik kochilgei amun moegitu ago norchin omitwogik alage koechen.

Koborunet ne karan ak minet.

- Chomchin ketik korut kot koit kogong .
- En TIST kochamtaat inges ketik kebebertab 5% en ketik cheitinye chebo kenysisiek taman asi inyoru melegto.
- Isten ne meat, ne mioni ak nemotinye kenut.
- Boisien tugul cheitinin chimiten kwony en oliyet.
- Min ketik chegororon.
- Ruten iger ketikuk igomiten ne mioni anak kogonam isirek.
- Oyomegei ak biikab sirigali asi komuch koter miyowokik anan ko isirek che ome ketik
- Ogeter anan ogerib mat.

DO NOT do this



Clear cutting

DO THIS



Single tree selection



Ribet ab waste (Saratik)

Waste anan ko saratik ko ki age tugul ne mamagat yon kagobek kasit agetugul ne koyoe kimugulmet ago imuche komotinye manufaa en saaitnoton:

- Excreta/waste chebo binadamu.
- Omitwogik che kong'et anan ko tuguk che chafu en korigchok.
- Karatasishek che kigeboishen.
- Polythene bags.
- Chumoinik che Scrap, Koig che kigobek (dry cells).
- Sludge en Sewage etc.

Ne ne ibu rubbish en korotinwekchok ?

Saratik ko mogimu che kimwestoenge lakini tesokse yon:

- Mogiboishen resources komye.
- Yon momiten oratinwek che kimuche keitoen saratik, kochong'oegitun.
- Yon mogitinye (rubbish pits latrines,) ole kiwirchini saratik.
- Yon momiten naaet agobo amune asikoyoche kibose saratik en emet.

Ubaya Nebo Waste Management neya.

- Bete kororonindab emet, yon kachang'a saratik.
- Wechet 'ab bek, koristo, ak ng'ung'unyek.
- Chong'oegitun mionwogik.
- Imuche kogerak pipushek 'ab sewage.
- Wechet ab koristo kochanga sumu , chebunu koig che kigoyachegitun.

Sumu chemmiten koig che kigoyachegitun, anan ko saratik alaktugul, komuche koig sumu en tyong'ikchok anan ko lokog .

Ne ne imuche koyai groupishek chemeng'echen asi koter kiiton.

- Kobos kocherunet 'ab waste.
- Koyom koboishen koig chebo solar, angamun mosib koweckokse.
- Yon imugogse iboishen tuguk kora matkewirta kou(ie. plastic bags).
- Koig mbolea – Konor waste che organic kou (omitwogik chekong'et anan ko fodder) koig mbolea en imbarenikchok.
- Tech ole kindo saratik en imbareng'ung.
- Ibwat ile imuche ipel kartasishek ichegen.Matipel koig angamun imuche kotyolso. Inde toilet(pit latrine).



Kasarta nepo, chopet ‘tap imbaret kokany.

Groupishek chepo TIST che kikonetke akopo CF, kokobaoryan kole chang’ ruutik kosir yon kakiminso keboishen oratinwek chepbo kenya, sanasana yon wo robta.

Toreti kering’oik chhoton bek koma rwai en imbar, ak ko’kochi minutik bek che yomotin.

Ng’alek chuton kotoretin inai kilimo hai komye ak ole kiboishoten. Ang’ kot isib oratinwek che choton kochong’oite ruru.

Ole kitayorishondo imbarenik.

l’ngol imbaret arawet ageng’e kotomo kobwa robwek.

- l’tilil imbaret koisto ke chema’si .Amati ng’ol.
- Bal kering’oik che rectang’ular . Nyolunot ko 15 cm en boroindo , 35 cm koindo and 15 cm loindab kering’et. Lochindap kering’oik keyoche ko 75 cm.
- inde mbolea safi che ing’olotin ak mbolea chebo duka, ng’ung’unyat ‘ab barak. Inyit kering’et ak kong’olanik choton agoi 5 cm.

Minet.

- Yon imine keswek ‘ab andek (betushek 1-2 kotomo konam robta),Min kewek 4 kong’et kering’et.
- Ang’ot imine , min 5-6 keswek en mwisho nebo keringoik yon kokorobon.
- Tuch keswek ak ng’ung’unek ak mbolea 2.5 cm. Koboch yuton konyolunot koloindab ng’weny ko 2.5 cm kong’eten barak.
- Nafasi nemiten barak ko’kochin.

- Molazima iboishen mbolea chebo fertilizer en Conservation Farming plot. Keswek kuk korurtos ogot ang’o meboishen mbolea chebo fertilizes .

Istoet ‘ab saratik en imbar.

- Isten saratik en kering’et kila weekit.
- Mati’iste saratik en imbaret tugul.Tobonwokik ab kering’oik ,Minutik kotuche ng’ung’unek, koko’koite ng’ung’unek agityo koter komoib robta ana ko koristo. Iten saratik chemi yebo kering’et kityo. Boishen panget ltilil imbaret koistoke saratik. Isten saratik kila mara asi maibista kochut kering’et.
- Bakaten saratik che’ketutu en imbar asi konuno. Tese bombonindab imbaret.

Tuguk che kiyoe yon kakebutis.

- Matibel saratik che kong’et en imbar.Bakagten saratik choton en imbar asi kotes mbolea en imbar. Kimuche kora keboishen ke chobe manure .
- Amati bokokchi tuga koaget en imbaret. Kaikai ibwat ile,Tun kiboiboienchini tugul tun koruryo minutik kuk ak inetke en youtik che miten en erea neng’unget ak tuyoshek ‘ab cluster asi kotesak rurutik.

Inam ing’unon!



Reporting nebo cluster : Ongebchei borotet .

EnTIST, Kesiche kimnotet nyon en bcheet 'ab borotet en Small Groups chchoket , ak en clusters,.Reports chebo kila arawet en clusters en tuyoshek chebo cluster ak accounting ko kit nebo maana sana en clusters chechoget . Kila clusters kotinnye jukumu koker kole koigoito reports en kila arawet agobo cluster accounting ak tuyoshek . Quantifier nebo cluster nengwonget ak Trainer kotoretok koker kole reports ichuton kokakisubmiten keboishen Palm computer. Komolo kimuche keker reports ichuton enTIST mobile website. Kou nito kimuche kotageigun transparent ak koet ngomnotet.

Cluster servants koyoche koyai kasit ak Quantifier ak Trainer koker kole kokikoito reports che imanit akobo ngalek 'ab cluster elections ak representatives. Kote kotagetoretike, Kotese ta koetu TIST.

Kobwotuyet : Asikebor en cluster konyolu keyai:

1) Ongebe tuyoshek chebo clusters ak

komwoitechi alak koba tuyoshek chebo groupit ak clusters.

2) Oger tugul results chekikonyor groupit ak cluster :Ketik che kikemin ak carbon credits che kironyoru.

3) Oyogten reports koba Palm for Cluster Meeting ak Cluster Accounting. Imuche iboishen SMS yon momiten Quantifier anan ko Trainerlakinin yoche komiten en tuyet asi koservenak .

4) Organizen quantification koboto Quantifiers. Ker ile kotoret chi en ngalek 'ab quantification.

5) Tach choronok cheguget kobwa tuyoshek chebo cluster ak imwochi icheket komin ketik en korikwak.

6) Ongeyai tuguk che yechen ak kimin ketik che chang' ak keal stoves cheribe mat.